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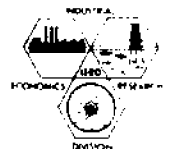
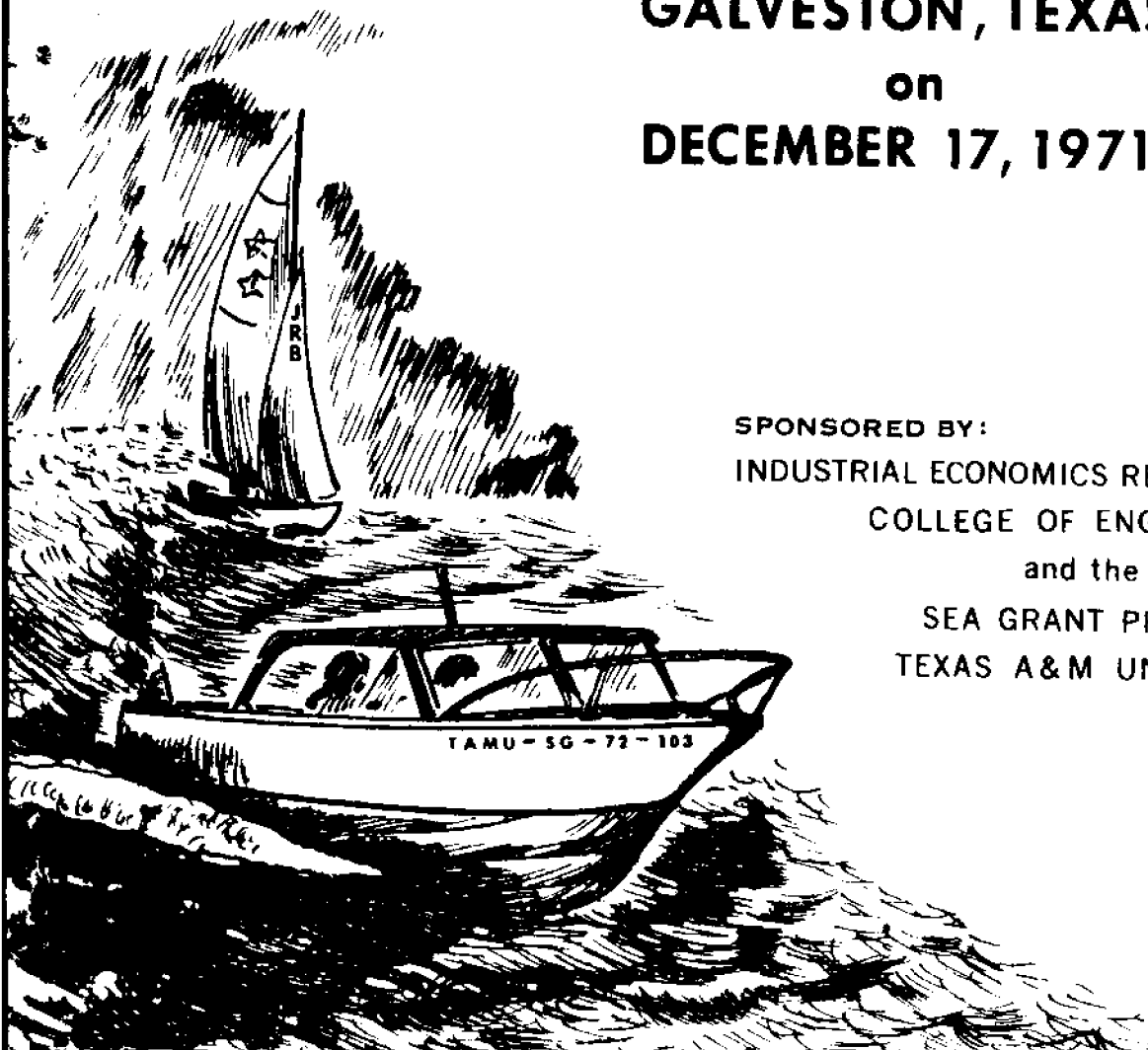
# **PROCEEDINGS**

## **OF THE**

# **RECREATIONAL BOATING SEMINAR**

held in  
**GALVESTON, TEXAS**  
on  
**DECEMBER 17, 1971**

SPONSORED BY:  
INDUSTRIAL ECONOMICS RESEARCH DIVISION  
COLLEGE OF ENGINEERING  
and the  
SEA GRANT PROGRAM  
TEXAS A&M UNIVERSITY



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Compiled and Edited by  
Kathryn M. Delaune

TEXAS ENGINEERING EXPERIMENT STATION  
College of Engineering  
Texas A&M University  
College Station, Texas

January, 1972

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## OPENING REMARKS

Kathryn M. DeLaune,  
Seminar Director

Good morning, Ladies and Gentlemen, let me welcome you to this our first Recreational Boating Seminar which the Industrial Economics Research Division and the Sea Grant Program of Texas A&M University are sponsoring jointly. We are experimenting today; we're glad you are here with us. However, before we begin, I shall ask Mr. Norman Whitehorn who is a member of our staff, to give our invocation.

## INVOCATION

Our Father in Heaven, we are grateful to Thee for this day and for the many blessings of life. We are grateful for this land of ours in which we live, for this opportunity that we have to gather here this morning to discuss those things of mutual interest to all of us, for this privilege that we can gather here unmolested. We pray, Father, that the discussion here will be for the betterment of those in this community and all people everywhere. In Jesus' name we pray, Amen.

Thank you, sir. I would like to take just a few minutes to introduce some of our guests who are not listed on the program for today:

Captain Sam Early, Commanding Officer, U. S. Coast Guard,  
Galveston, Texas;

Mrs. Leatha Miloy, Head and Editor of the Department of Marine  
Resources Information, Sea Grant Program, Texas A&M University;

Mr. John Miloy, at the registration desk, with the Industrial Economics Research Division and responsible for the Sea Grant projects of our Division;

Mr. Norman Whitehorn, also involved in Marine Advisory Services, works with marine-related, small business firms. I do the play work and he does the work work, and he's really been working this morning.

We appreciate your presence.

You will notice, I allotted only 10 minutes for opening remarks and introductions, and I have already used most of my time. But I must tell you why we are here. Let me give you just a few facts.

- . In 1969, Americans spent \$83 billion in leisure activities.
- . A conservative projection for 1975 is \$100 billion plus.
- . The Discover America Travel Organizations, Inc. predicts the long weekends created by the Monday-holiday law will help boost the leisure industry to \$250 billion by 1975.
- . The leisure industry is the third largest in the nation as well as in the State of Texas.
- . Statistics reveal that it is the largest single employer-- more people are employed in some type of leisure industry than in any other single industry.
- . Of all outdoor recreational activities, water-related activities are the most popular. Water is the magnet.
- . Of all water-related activities, recreational boating is one of the fastest growing.

. Boating registrations in Texas, and I emphasize registrations because not all boats are registered, have grown at a rate four times that of population within the last two years in the State of Texas.

. As of December 1, 1971, there were 310,226 pleasure boats registered in the State of Texas.

Recognizing these facts, the Sea Grant Program of Texas A&M University commissioned the Industrial Economics Research Division with the responsibility of providing technical information and assistance to marine-related industries and agencies which are involved in recreational activities. In May of this year, our Division undertook a survey of approximately 500 firms so related; 178 (36 percent) responded. The priority that was given to technical assistance and information in a group such as this--a four-hour seminar during the winter months--was recreational boating. So, here we are. This is the very first one. We're glad you're here; you are charter members. We hope that together we can share what information we have, and lay the foundation for future sessions.

#### INTRODUCTION OF MR. WILLIS CLARK

Before we go further into aspects of recreational boating, I want to let Mr. Willis Clark, Assistant Director of the Sea Grant Program, tell you just what the Sea Grant Program is. You have seen and heard the name and it is growing more familiar every day. Mr. Clark is the man who makes Sea Grant work at our university. He has had many years' experience in government relationships.

I'm not going to try to tell you all he is, except that he's a pretty great guy. He's no stranger to Galveston. He is a recreational boating enthusiast, has a schooner or something, and I am told he is an expert water-skiing instructor. John Miloy, under Bill Clark's capable direction, came up on his skis the first time out. I'm tempted to let him teach me.

Mr. Clark, I'm glad you're here. Please tell us about Sea Grant and share with us the film, "Sea Scape."

THE SEA GRANT PROGRAM

Willis H. Clark,  
Assistant Director, Center for Marine Resources,  
Texas A&M University

Thank you. I'll take off from the comments you have just made and elaborate a little bit. You're right on schedule, so I have plenty of time, I believe. I look at the agenda we have this morning, and it appears to me that we have some very interesting subjects to be discussed, and I know that they are problems of a significant nature to people such as you. I don't feel this morning that I can say I'm well versed in some respects. This reminds me of a story of this old boy who aspired to be a public speaker, but he didn't have much of a background for it. He finally decided that he might break into the racket by getting himself on programs where he could give the invocation. So, to get started, he sat down and wrote out on paper a series of prayers that he could study and give. However, he found out that he wasn't very well versed at making public presentations, either, or getting up in front of the public. So, he decided to stick these cards into a hat, and when he was asked to give the invocation, he would read from one of these cards in his hat. His technique was that he would wear his hat and whenever he was called upon to give the invocation, he would very solemnly take off his hat and hold it down in front of him and read the prayer that he had composed. This all worked very well, and he was requested to give invocations at many functions. He was attending a luncheon meeting on one occasion but he had not been asked to



participate. The individual who was to give the invocation did not show up, so he was asked to come forward. In his surprise, he dashed quickly to the cloak room, hurried back and stood up in front of the group. Very solemnly he took off his hat, held it down in front of him, looked down into his hat, looked up sharply and said, "Oh Lord, this ain't my hat." Well, maybe this is the situation I'm in right now. This ain't my hat talking to a group like this, but as Kathryn just mentioned, I have a certain hobby that maybe makes me fit into this category of boat owners--not a schooner, Kathryn, something about seventeen feet long. We enjoy it thoroughly, and I'm known as a very colorful water skier. What that means is I dismount in a different fashion every time--sometimes head first, sometimes skimming on my back in the water. My wife finds it very entertaining because I never crash the same way twice. As far as being a water skiing instructor is concerned, I'm not quite sure that my qualifications are as good as you said because on that same occasion, I attempted to get the other half of the Miloy family, and I used about two tanks of gas that day and never did get Leatha into a vertical position. So, I can't say that I'm a very good instructor.

As Kathryn has noted, this matter of boating, and recreation and tourism in general, is one of the fastest or is the fastest growing industry along our coastline. Certainly, it's a people problem and all of you are concerned about the impact of your work on people. It's a problem which involves land use, pollution, and financing, as I see it. In connection with the first matter of land

use, I was reading in Austin the other day, an article concerning the involvement of a number of heads of State government adopting a new set of guide lines for the preparation of impact statements on state-supported projects. There was a lot of flowery language in the document. I think the most interesting thing was a paragraph which the group inserted for the purpose of letting the agency heads know that the people who were working on environmental impact statements were not regarding our future in a doomsday attitude. The principal purpose of these impact statements and the thorough study that we get concerning land use is to understand what we are doing and the effects of what we do. The idea is not, as I say, to assume a doomsday attitude on these matters, however. Unfortunately, I think that's the way it comes across many times.

Boating safety is certainly a very important thing, and from my comments earlier, I think you can appreciate the fact that I am aware of this subject and think it is very interesting to find a pamphlet over on the table having to do with boating safety.

Pollution, I know, is a problem for all of you in the boating industry; I am given to understand that federal regulations which have come out in the last year are creating many problems. My boat, a small one, doesn't have any accommodations in it. Larger ones do. All of us are familiar with the problems that arise when one is out in the middle of the lake and there's a ten-year-old son aboard who suddenly says, "Mommy, I have to go to the bathroom." Well, we've been accustomed to this problem over the past years, but with the greater number of people going out onto the lakes and bays, the

cases of the Rommies having to go to the bathroom multiplied many times over, it certainly does become a problem as far as our pollution is concerned. This I was alluding to earlier, a belief that certain regulations are being brought into effect regarding requirements for holding tanks on boats. It is one thing to require people to have holding tanks on board; it is quite another to provide a place for them to dump these holding tanks. Since I also have a camper with a holding tank on it, and sometimes spend hours driving around looking for a dumping station, I can understand the problems of a boater with a holding tank. He's not necessarily enthralled with the idea of carrying it home with him. I just wanted to make those few introductory comments relating to your problem and, as I say, to the broader problem of recreation and tourism.

Now turn to the matter of Sea Grant. This is a program that was brought about by an act of Congress in 1966, and it was not until about 1968 that grants were made to institutions to pursue a program of marine related affairs. The idea, of course, comes from the land grant concept which has been with us for quite a long time. It is expressed that educational institutions have been able to make very significant contributions to the development and well-being of the farmer, that it would be well to try to put our institutions into a position where they could do the same thing in exploiting the marine resources. When we use the term marine resources ourselves, we do this in a very broad context. Most people immediately think of things like the fishing industry, or the mineral industry, but in our own program at Texas A&M, we have expanded this so that we can serve all elements of the resources and commerce in a region to

be under the curfew of the Sea Grant Program. We think that this has been a good move, and we think that with our funds available to us, we have been able to make a rather significant contribution along with many others to the realization of the benefits that can accrue to all of us through the wise use of our coastal areas. Texas A&M was one of the first six institutions to get a major award under the Sea Grant Program and this type of a program encompasses research, advisory services, and education and training. Actually, our research program absorbs about half of the dollars involved. We are making very serious attempts to expand in the area of what we call advisory services to get people on our own staff, participants in the program, working more closely with those in the businesses of all sorts along the coast to see what can be done to make their business more profitable and make the state a better place in which to live. Very recently, last September, the institution was designated a Sea Grant college. This is a symbol, I guess you would say, because that designation doesn't mean anything to us in terms of a larger program of dollars or anything, but it probably will put us on a better footing as far as a continuing program is concerned, and, for us, it is certainly a feather in our cap. We feel it was a recognition of a program that has, in its very early years, accomplished a great deal toward helping the state. Texas A&M was only one of four institutions in the country to get this designation. The others were Rhode Island, Oregon State University, and the University of Washington.

Turning now to the film that we have to show you, I would leave my comments on the Sea Grant Program with those few brief remarks

and perhaps after we're finished here, some of you may want to question me a little bit more about it. In attempting to devise mechanisms where we can reach people of all walks of life, people engaged in specific businesses and people in civic clubs, high schools, educational groups around the country, we have developed a series of publications, many of them, I am sure, you are familiar with. But, in addition to this, we wanted to be able to enrich the presentations that we would make to groups around the state, and it seemed that a likely way to do this was by preparing a film that depicted some elements of the Sea Grant Program. We had examined films that were prepared by other Sea Grant institutions--some of which were quite technical in content and on the order of 30-40 minutes in length. The thought we developed was that of a brief message--something that was colorful which would really get to a person. This is the nature of the film you will be seeing. It doesn't explain the Sea Grant Program in detail, but it does give you a very good overview of what we are doing and, as I said, it is colorful and has some thought-provoking comments in it. I would remark that the film was produced under the direction of Mrs. Leatha Miloy in our Department of Marine Resources Information and done for us by a firm in Dallas, Bill Stokes, Inc. The film basically shows several scenes of various projects that we are conducting and then it has a flash back. For each subject looked at briefly, there is a flash back and the voice of an artist from Galveston who worked with us during the preparation of this film is heard. His contribution is a very useful part of the message, I believe. May we have the lights lowered, please.

(The Film--"Seascape")

Kathryn got us started on time this morning, and in the true fashion of people from Sea Grant, I've managed to get us behind already, but if any of you do have any questions that I might answer for you right now, I suppose I could steal a few moments. If not, I'll be around if anyone wants to make any inquiries about our activity. At the coffee break I'll be very glad to talk to you.

INTRODUCTION OF MR. LEWIS HARRIS, C.P.C.U.

Next on our program is a most important item, insurance. When I came down on my first visit to talk with Mr. Tom Purdy, General Manager of the Chamber of Commerce, the first gentleman he recommended, after scanning the tentative program, was Mr. Lewis Harris. He said, "He is the man with all the insurance knowledge." I was real pleased when I visited with Mr. Harris. We were discussing tort liability. I have the background of a municipal recreation, and we face this problem quite often. He told me that he was instrumental in interpreting the Texas tort liability law as it relates to marine activities. On a second visit, I asked his secretary what the C.P.C.U. stood for. I knew of Chartered Life Underwriters, but I was not familiar with C.P.C.U. It stands for Chartered Property and Casualty Underwriter, and is an earned degree. Mr. Lewis Harris was educated at Boston University. He is the owner of the Austin Insurance Agency and is also president of the Galveston Insurance Board, which I think speaks well for him. Other

than that, he is insurance counsellor for the Galveston Independent School District, the City Council and the County of Galveston. Mr. Harris, I think we are indeed fortunate to have you with us this morning. I appreciate your coming. I have asked him to talk with you and to answer any questions which you might have.

## MARINE INSURANCE

Lewis Harris, C.P.C.U.  
President, Galveston Insurance Board

Thank you. I wondered about whom you were talking for a minute. Others on this program will tell you how to increase your business, make more money, or operate more efficiently. I am sorry to say that is not my function. I know some of you have the idea that insurance is an expense that you would like to do without, but your banker won't let you. But if you've ever had a serious loss, then how comforting that insurance policy is. How sweet the consoling words of your agent, and how proud you are of your own good judgement in providing proper insurance. Suddenly you become a believer, and rightly so. For the function of insurance is one of the basic foundation stones upon which our complicated economy is built. We couldn't conduct business without insurance, nor would we want to. Let's look at this complicated, sometimes frustrating, always costly economic device we call insurance. What is it all about? What does it do? What is its function? The best short definition of the purpose of insurance from our point of view is: "to conserve asset values." Notice the word values--that doesn't mean the facility you are building or your property or your boat, but the value of it. Everyone in business is exposed to risk and the chance of loss. This risk is of two major kinds: (1) dynamic risks, or business risks; and (2) static risks or pure risks.



### Dynamic Risks, or Business Risks

A dynamic risk or business risk carries with it not only the chance of loss but also the chance of gain, such risks as:

Market Price--will our product sell?

Financial Risks--the proper handling of your money.

Management risks--depending upon the knowledge and efficiency of management.

Speculative risks--will profit be made?

Dynamic risks, as above, are obviously not a subject for insurance.

### Static Risks or Pure Risks

Static risks or pure risks, in contrast to business risks, represent no opportunity for gain but only offers an exposure to adversity or loss. In this area, the business of insurance functions by shifting the burden of financial loss to a professional risk carrier--an insurance company.

There are five major categories of static risk:

1. Risk causing physical damage to owned assets, for example a building burns or a boat sinks.
2. Adverse judgements at law, such as claims for damage to property of others or injury to a person due to negligence.
3. Damage to property of others in our care, custody, or control.
4. Statutory risks imposed upon us by laws such as Workmen's Compensation statutes or Harbor Workers and Longshoremen Act.

5. Risks caused by fraud or criminal violence, burglary, theft, embezzlement.

How do we avoid these major chances of loss? The obvious answer is insurance--the transfer of risk. But, this is not the only way to avoid loss or necessarily the best way. Attention should be given first to the risk management process. For example, risks may be avoided. Fringe operations which produce little or no profit may be eliminated. Hazardous operations may be stopped or reduced. In general, whenever a risk is so great that it cannot be counter-balanced by the possibility of gain, avoidance is a prime method of handling the risk.

Another way is by the assumption of risk; risk may be assumed. Assumption of risk, however, should be planned and not haphazard. If size of possible loss is small and reasonably predictable and will not seriously affect assets, risks may be assumed. We do this all the time when we buy deductible collision insurance on our automobiles. The deductible portion is your assumption of risk. Risks may be reduced by managerial control, such as material controls of systems, audit and accounting controls, segregation of assets, diversification. Loss prevention and control is another way of avoiding risk. These measures should be instituted by the use of safety engineers, fire protection engineers and other specialists. Insurance companies have this kind of professional help to offer. I strongly suggest you make use of them. To be effective, however, loss control should be on a planned, formalized basis and have the complete backing of management. Risks may be shifted by contractual agreement as between supplier and dealer and between dealer and

buyer. All of these suggestions for risk management have the added virtue of reducing your insurance costs which certainly should be a motivating factor.

Finally, after considering and using the principles of risk management, we come to the risks that are the subject of insurance--the transferring of risks to a professional risk carrier--the insurance company. How is this best accomplished? May I offer some suggestions.

1. Don't try to act as your own insurance agent. Instead, use your best judgement and choose the most knowledgeable agent in your area. This may not necessarily be the agent who is your golfing, drinking, or fishing buddy.
2. Cooperate fully in providing him with all the information he needs. Give him the time he asks for, not grudgingly but wholeheartedly. If you have chosen your agent well, he will present you with an insurance program that will fit your exact needs, protect your asset values, and keep you in business. In short, he will be your own insurance buyer. All you have to do is pay the premium, graciously, I trust. Don't groan. These insurance payments are a necessary cost of doing business. Your competition has the same costs. These costs should be built into your trust structure--and one bright spot, they are tax-deductible.

What we have talked about so far are principals, background, and philosophies of risk management that are necessary to an understanding of the insurance function. Now let us get to some

specifics. Namely, what are your major exposures and how to insure against them. These exposures fall into three major categories: (1) property risks, (2) statutory risks, and (3) liability risks.

Property Risks. Any knowledgeable agent can tell you how to insure against loss to buildings on land, contents, equipment, furniture, fixtures with the standard fire and what we call extended coverage policies coupled with whatever endorsements he might recommend in addition.

For boat dealers who have another problem--the problem of boats--there is a boat dealers policy. Let me read the insuring agreement of such a policy. "This policy insures stock for sale consisting of private pleasure inboard motor boats, sail boats, outboard motor boats, outboard motors, canoes, row boats, boat trailers and accessories, equipment and supplies." It does not cover property after delivery to a customer. If you sell a boat to a customer, this policy cuts out. It's your customer's problem. It doesn't cover property while in the course of manufacture, but presents a different type of insurance and this is not designed for it.

It does not cover property held for repair, alteration, or storage under seasonal, temporary or other bases. Don't be alarmed about this. There are other policies that do cover these.

You have to choose your limited liability and these are the perils insured against. This policy insures while on shore, at locations against all risks of direct physical loss or damage except this hereinafter excluded. You will hear a lot about the difference

between all risk policies and named-peril policies. Of course, I am recommending that you consider first all risk policies, but don't be misguided. There is no such animal as an all risk policy. The difference between the two is: a named-perils policy covers only those perils named, such as fire, wind storm, explosion, and so forth, and nothing else, while an all risk policy covers everything that is not excluded, and there are exclusions in every all risk policy. It is not literally an all risk policy. You have automobiles. These are covered very simply by an automobile policy which will also cover your liability, collision, fire and theft and comprehensive. You have piers and walls; you have to have very special marine coverage for this because your standard fire policy excludes property extending over water and besides, there are other perils besides fire that are important to the coverage of piers. If you have movable equipment like fork lifts that move around and are not in one place, these should be covered by an equipment floater which will provide the proper coverage and will follow the equipment wherever it is.

Statutory Risks. The second category of risks is what we call statutory risks. This is liability imposed upon you by statute and not by common law, not by court liability, but specifically by statute. For example, Workman's Compensation or Harbor Workers' or Longshoremen's state laws. In the State of Texas and to a certain extent true in other states, if you have three or more employees, you have to guarantee to these employees the benefits of this state's compensation acts.

This does not say that you have to buy insurance to guarantee these benefits, except that the only way you can guarantee these benefits is by following a standard Workman's Compensation policy. Once you have done that, you have complied with the act and cannot suffer any penalties. And, the Workman's Compensation policy has, in effect, built into it the Workman's Compensation Statute and it will tell you what the statute says: "unlimited medical, X amount of money per week for X number of weeks, etc." However, for a marine-oriented type of operation, there is a danger. The minute your employees step off of land on to a boat or even in some cases on the pier, their workman's compensation cuts out. But to take care of this responsibility that you have imposed upon you by law, you must have added to your Workman's Compensation policy, an endorsement providing coverage for the Harbor Worker's and Longshoreman's Act. The premium for this is higher than Workman's Compensation; rates usually are one-third higher. But this is the only way an employee of yours can be covered if he's injured while working on a boat or out on a boat. So I thrust upon you, the Workman's Compensation for your type of business is not sufficient. There is a grave lack there that can be dangerous unless you have the Harbor Worker's and Longshoreman's endorsement added.

Liability Risks. Now we come to the broad and confusing area of risks that are created and imposed by law--not by statute, but by common law through the years, by case law, by law that is on the books today as judgements and custodies--that is, the liability risks. These types of risks are dangerous to you and your financial

well-being. They can be catastrophic in size and must be covered with care. You people in the marine oriented business are twice blessed; you have both liability exposures on land and water, both different, and insured in different ways. Your on-land exposures against loss from a third party or liability loss, are comparatively simple and routine in coverage. I suggest you buy or consider the comprehensive and general liability policy, which is the broadest form of liability. The limits of these are two, one for bodily injury, one for property damage, and I suggest at least \$100-\$300 thousand for bodily injury, and \$100 thousand for property damage. If you can get it, broad full property damage by endorsement and automatic contractual liability and write this on an occurrence basis. I'm not going to make any attempt to get too technical with this. Your agent should offer you this, but maybe if you took some notes and suggested it to him, it might jog his memory.

You should also consider in addition the coverage that has become extremely important--personal liability, which is an entirely different thing from bodily injury liability, and the elimination of the chair-custody and control exclusion which is built into every liability policy. That will take care of your exposures to members of the public on the property you own, to any of your land-plan based operations. However, it will not take care of your water oriented exposures. Again, we have a variety of coverages depending upon the type of operation you have. If you operate a marina, there is an excellent marine liability form which covers operations such as: alteration, repair, maintenance, storage, docking at slips and spaces provided by the insured (that's you), mooring and anchoring of buoys or areas provided by the insured, fueling supervised by

the insured, hauling or launching, and it can be extended to include any other specifics that you might be involved with. The insurance coverage is: "This insurance covers, except as hereinafter provided, the legal liability of the insured arising out of operations covered under this policy for loss or damage of private pleasure vessel, a craft including their hull, sales materials, . . ."

And this insurance also covers the legal liability of the insured for loss or damage to property other than that referred to above. This takes care of most of your property damage exposures as a marina operator, the boats you do not own, in care, custody, or control, or what can happen to vessels moored at your docks, tied up, or when you're taking them in or out of the water for your customers.

If your operation is heavy in ship repair, you need coverage under the ship's repair liability policy. You may or may not know it, and I hope you are aware of it, that if you send your people on a ship or a boat to do repairs, and due to their negligence, that boat is destroyed, caught on fire or sunk, it's your baby. You have a legal liability to pay for the damages caused by the negligence of you, your employees, or agents. This is called ship repairs liability policy.

Let me briefly read the insured agreement. "This insurance covers the legal liability of the insured as ship repairers for loss or damage to vessels, craft, equipment, and so forth . . . . This insurance also covers the legal liability of the insured as ship repairers for loss or damage of property other than that referred to above." You might set a ship on fire which you are working on and destroy some adjoining ships, and that takes care of that.



Party boats and boats used for hire for passengers in charter operations need special and careful attention. All of these policies I've mentioned and read portions of exclude this coverage. They should be removed by endorsement for a fee. Care should be taken in your protection and indemnity coverage to eliminate certain exclusions, particularly those which exclude coverage when the insured vessel is being used to carry passengers for hire or being chartered or loaned out.

Let's talk about protection and indemnity insurance, which I just mentioned. If you will think of this in a similar vein to which automobile liability insurance covers, bodily injury and property damage liability, you will have a clue to what protection and indemnity insurance covers. It's just a name used for the same coverage for boat and marine operations. It takes over when your exposures for third party liability are on the water, for any damage caused by your vessels or your vessels in shore. Let us read an insured agreement from that: ". . . covers property damage, loss or damage to any other ship or boat or group of merchandise or freight and covers personal injury liability, loss of life, life or personal injury to others." It also has some exclusions which must be considered, ". . . the coverage afforded shall not apply while the within insured vessel is being used to carry passengers on hire or being chartered or loaned." This can be removed by endorsement. It does not apply to liability insured by any contract or agreement. It does not apply to any person who is a trespasser, nor does it apply to any employees, but

we have talked about how that can be taken care of. There are other policies which can be used as endorsements which cover these exclusions.

These policies, although confusing, fit together like a jigsaw puzzle. If you are confused, you should be. That is why you should choose your agent with care.

One further coverage is worth considering--protection against a giant liability loss. I'm talking about a coverage called bumbershoot liability, which is an umbrella of liability coverage over and above what we discussed. This policy starts with a limit of \$1 million excess over your other liability coverage and can go as high as \$5 and \$10 million, or even more. Whenever you have a catastrophic liability exposure, such as 100 people on a party boat, please look into or consider this bumbershoot liability policy.

I have not attempted in the time allotted to go into great detail on coverage, but have instead tried to lay down some guiding principles for your consideration. I would, however, like to point out some areas of concern.

1. Be sure you have told your agent about any contractual or assumed liability particularly any "hold-harmless" agreement which you may have signed. You can assume any liability you want by contract--liability outside of what the law imposes on you--and you may find it advantageous to do so for business reasons, but these contractual assumptions of liability are not covered in your basic liability policy except in a very minor way. They can be covered very simply

if you tell your agent about them. Give him a copy of what you have signed and agreed to and have this become part of your policy. The cost will be surprisingly small.

2. Make sure your capacity for high exposure, if any, is covered. Buy broad form coverage and not named-peril coverage. I think I've explained the difference.
3. Get more than one quote through your agent from more than one company, because the premiums for most of the marine rated risks are not controlled, but are judgement rated and companies vary in their ideas of what's acceptable, what's one company's meat that they may offer at a low rate is another company's poison, so test the market. Don't just be satisfied with one quote.
4. Remember, these forms are flexible and specific, and unusual needs can be met. Policies in effect can be tailor-made to fit the risk. Marine insurance is one of the few areas where there is an opportunity for creativity. The forms are not standard, the rates are not standard, neither the forms nor rates are promulgated by the insurance departments of the state. For example in Texas, a standard form is a fire form which you would use for insuring a building. There is only one policy, one form that's admitted, and every company has to use the same form, at the same rates, and the same to a certain extent for automobile insurance and other types of insurance. But this does not hold true in marine insurance, particularly wet marine. The forms

are generally standard but they are subject to change without any consent from the insurance department; the rates are judgement rated, they're not fixed by the state, and you should work toward this end to get a policy that exactly fits your needs.

Many of these policies that I have talked about with endorsements, prevent the need for having four, five or six policies. They can be combined in one or two policies by the use of forms.

Let me repeat again. In your own best interest, choose your agent with great care. Give him your fullest cooperation. He is responsible or will be responsible for your business well-being and your financial life. Thank you. If there are any questions, I'll be glad to try to answer them.

Question: Will the "no-fault" insurance law also apply to marine vehicles?

Answer: Maybe, if you don't know what "no-fault" means in automobile insurance, you're substituting for the conventional tort liability section, what tort liability you might have if you injure somebody. There will have to be legislation passed and it takes an act of legislation by the state legislature. Saying, and this is an example, that up to \$10,000 or whatever limit they put into it, tort liability is eliminated. If you have an accident and it's your fault and Mr. Jones is damaged to the extent of \$5,000 or \$6,000, he cannot sue you for damages. He cannot sue you for pain or suffering or anything else. He will collect under his own policy for his out-of-pocket

expenses which will include, of course, all medical bills and time lost from work if he has time lost, but nothing else. And the same goes for you. In effect, each of you will collect for your bodily injury loss, medical expenses and so forth under your own policy. This has been instituted in the state of Massachusetts as of January 1, this year. That is the first state where it is in effect; four other states have already passed legislation. It started off in Massachusetts with a 15 percent reduction in premium for the bodily injury section of the policy which comes under the "no-fault" and I just read the other day that they're thinking of increasing the reduction to 27 percent because it has worked so well; I think it's here. It's an idea whose time has come, and will be passed. I think also that it should be done under federal guidelines to avoid 50 different kinds of no-fault insurance, and I think that the Department of Transportation is working on laying down some minimal federal guide lines. I think it's a great idea, personally, and it will be here. Of course, there's one problem. Legislation has to be passed by state legislators, and there is a great majority of legislators who are attorneys, and this eliminates some of their business and livelihoods, but they're getting to it. I attended a seminar on this as long as six or seven years ago, and the attitude at the time by company executives was, "We don't want any part of it." But they switched around. They're supporting it now. It will happen, and I think probably within the next legislative session. Now, this can be extended to marine liability, too, but it will have to be on a federal basis, primarily, to be done with the legislative

body's say so. They have done this in this state as far as removing the immunity from liability claims for governmental agencies. They did that almost two years ago.

Question: Is there any attempt to standardize this on behalf of the federal or state government bodies? Insofar as personal boat insurance, are there any innovations coming out of the federal government?

Answer: In answer to your first question, I think I've pointed out that marine insurance is an area where there are very little state controls or rates, and therefore, there are multiplicity of policies covering small boats and even larger ones. However, competition has more or less standardized these forms, this is where you will have to exercise care in what you buy through your agent. I have maybe a half-dozen files in my office from different companies, different boat plans for the small boat user. Most them are different only in that they have some unusual gimmicks that probably do not amount to much. You have to be concerned with the basic coverages, and you can buy the gimmicks if you want to, but basic coverage is on loss of your vessel by perils of the sea and on the sea, and also if it's a small boat by towing, by fire, collision, stranding, sinking, and a marine policy also says, and it's the oldest form of policy written, that coverage against loss by pirates or sailing thieves. Now, we may get to that in the water, I don't know. But those are the basics and then, of course, your liability. And this can be written in various forms, either just a boat liability policy for a small boat or protection indemnity coverage,

which amounts to the same thing but is used on larger vessels. But the standardization is only by competition. Each company varies in its different frills. You have to exercise your own care and judgment. There are no standard forms.

In answer to your second question, I know of no state or federal regulations that are controlling this at all. Thank you.

#### INTRODUCTION OF MR. JOHN DOUGLAS

Next on our agenda is Marketing Trends and Dry Storage.

I visited with Mr. Douglas in his lovely facility across the street at the Galveston Yacht Basin. During our conversation, I asked him what his official title is, and he said, "Well, I don't know what to call myself. I guess I'm Manager of the Dry Boat Storage Division of the Galveston Yacht Basin." He's been here in this capacity since 1966, but he tells me that he has lived around the water all of his life. Mr. Douglas, we're happy to have you with us, and the time is yours.

## MARKETING TRENDS AND DRY STORAGE

John D. Douglas  
Galveston Yacht Basin  
Dry Boat Storage

Thank you very much. Mr. Harris skipped out of the room. I was going to say that he's a very good customer of mine at the Galveston Yacht Basin and next year when we contemplate raising our rates, I've got a good reason--all of this additional insurance that marinas and boaters need. Seriously, it's a privilege to follow him on the program.

I'm glad that Miss Delaune prefaced her remarks pertaining to leisure. I thought we would spend some time thinking about that this morning. After all, without this leisure time that people have, recreational boating wouldn't be what it is today, and we in the marine business wouldn't be enjoying the business. Of course, a lot of time we in the marine business don't know what leisure time is. However, this time of the year we get to have a breather. But leisure has become a part of the way of life for Americans. The pursuit of leisure activities has become more than just an occasional hobby that's enjoyed once a year. This pursuit has become secondary only to our livelihood, and a great deal of time and money is spent not only in enjoying this leisure, but in preparing for it.

The best indications of change toward more leisure hours in the past 50 years are the shortened work week, the paid vacation, holidays, and other forms of free time. Most of these have assumed major importance only in the last 50 years. The average work week



at the turn of the century was about 53 hours; today the average is closer to 40 hours. We have industries and businesses that are experimenting with the four day work week, with the prediction that within the next 15 to 20 years, this will be a way of life for most Americans. All of these trends lead to more time to spend in leisure activities, with one of the fastest growing leisure activities being recreational boating and other water-related activities.

Another factor contributing to increased time spent in the pursuit of leisure is the increase in paid vacations and holidays. The movement toward shorter hours has dominated the reduction of the work week; however, vacations and holidays have become more and more important in recent years. The paid vacation was first extended to professional workers, managers and officials, but of course, now most wage earners do have paid vacations. Since 1960, paid vacations have spread rapidly. In 1968, two-thirds of all workers in private non-farming economy received a paid vacation. The recent growth in the number of vacations has been spectacular. In nine years from 1960 to 1969, the total number of weeks that workers spent on vacations increased almost 50 percent--from 87 million to 129 million weeks of vacation in a year. That's a lot of vacation time. In the marine and recreational boating field, I think we need to recognize this increase of time, be geared for it, and help to stimulate interest in recreational boating. The average length of the worker's vacation increased from 1.3 to 1.7 weeks while vacations increased, for full time workers, from 1.8 to 2.2 weeks. In addition to paid

vacations, office workers receive an average of eight paid holidays per year. Right here in Galveston, one of our largest employers extends to their employees in addition to the regular paid holidays, a holiday on their birthday; so this points up to the extremes in holidays and leisure time.

Another factor contributing to more leisure time is the increase of life expectancy. A retired person has more time and money to spend in the pursuit of his leisure activity. More and more people are turning to recreational boating in their retirement years.

Gains in additional free time amount to about 675 hours per year, just from a reduced work week. The Bureau of Labor Statistics indicates that workers average about 1.7 weeks vacation with an average work week of about 40 hours. Vacations account for about an additional 70 hours per year of free time, compared to workers of seventy years ago. They also indicate that all workers received an average of about 5.5 holidays a year, which is about 45 hours of additional free time annually. Vacations and holidays for workers add to an additional 115 hours per year. And this, along with the reduced work week, makes a total net gain of almost 800 hours per year in additional free time that people enjoy today, compared to people of 70 years ago. That's roughly one month out of twelve.

Since 1960 alone, all workers have gained about 50 hours a year in free time from work, about 30 hours from a reduced work week, 15 hours in additional vacation time, and about four in holiday time. That's since 1960, alone. These gains that workers have made in time free of work have been substantial, and yet a further reduction in work hours over the long term seems to be assured. Longer

vacations and longer week-ends also represent months of leisure times that are gaining favor. Although a four-day week may be distant for most workers, there are advances in that direction. In 1970, there were about 7,000 workers distributed in firms and industries around the nation that were on a four-day work week. During the rest of the Seventies, further reductions in working time is likely to be small, with attention centering on the reshuffling of free time in order to provide larger blocks of leisure time, such as the advances in changing holidays in order to provide the three-day weekend.

As we look at 1972 in relation to the recreational boating field, the business outlook is good. According to Boating Industry during the 42 years of their history (their publication has been a barometer of the pleasure boating field) their advertising gains and losses have almost exactly matched the sales curves of the pleasure boating field. In their September, 1971 edition, which was the 1972 Trade Show edition, they state that there was a net gain of over 22 percent in advertising in that edition, and it was the largest publication that they had ever published.

Business conditions in the pleasure boating industry during the month of August were running well ahead of expectations. I have a chart I'd like to show you and talk a little bit about. Of course, this is for the month of August. As a rule, July and August are the biggest months in recreational boating, and this is true in our business at the Galveston Yacht Basin. These are net gains that were reported:

Statistics of the Pleasure Boating Industry  
August, 1971

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Outboard Motors	+74.3
Trailers	+41.0
Inboard Boats	-25.2
Outboard Boats	+28.0
Inboard/Outboard Boats	+6.0
Sailboats	+14.0
Houseboats	-1.1

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I was at a dealers' meeting in Seabrook yesterday and was very interested in hearing that Texas leads the nation in outboard motors. As far as units (number of units sold), Texas leads the nation for the first time in outboard motors pertaining to recreational boating. We are only one-half of one percent behind the leading state, which is Florida, in volume of sales as far as money is concerned. Maybe if all of you in this room come over to the Yacht Basin and buy an outboard motor from me after the meeting, we'll be number one. This chart is a result of the joint summary by the National Association of Engine and Boat Manufacturers and the Boating Industry. I think one of the significant things this chart shows is the trend in powering boats with outboards.

According to this survey, for the entire model year of 1970-1971 versus 1969-1970, there was a gain of 21.4 percent in the shipment of outboard motors and a 1.4 percent gain in inboard-outboard boats. Of course, many outboard motor purchases are for

the purpose of repowering, but there is a definite trend in powering boats up to the 24-foot class in outboards. (I say 24 foot because this is where my experience is limited. At our facility, we store, handle, service and sell boats up to the 24-foot class. Outside of maintenance in salt water, I think outboards have a lot of other reasons for the return of their popularity.) Outboards have come a long way since a man named Ole Evinrude clamped on a noisy, smoking motor and motored down the Kinnickinic River in Wisconsin in 1909. That engine was the premier of the world's first successful outboard motor. Aside from the economy of maintenance, today's outboard motors have the power needed with horsepower ranging from two all the way up to 125 horsepower. Today, outboard engines are quieter and more dependable than outboards of the years back. In 1949, the oil-to-gas ratio for outboards was 12:1. In 1964, this was 24:1 and in 1970, 50:1. This means more fuel economy, less smoking, and I'm glad to say, less water pollution. It just so happens that I sell Evinrude outboard motors. On the inside front cover of their catalogue, rather than using this space to advertise their product, they put in here "Clean Water--The First Order of Business." I think for all of us in the recreational boating field, this certainly should be our first order of business--clean water. I'm glad to be here this morning, especially with the work that Texas A&M is doing in this regard. The best example of this that I can think of is that of a young couple in their early thirties to whom I sold a 17-foot outboard and trailer--a complete rig. The couple had two small children. His interest wasn't primarily in fishing, but just in family boating. He enjoyed taking Sunday afternoon cruises with his

family and water skiing. He was real enthused when he got this boat. It was their first boat and as soon as we delivered the boat to them, they started using it. After about six months, he brought the rig back in to me, wanting to leave it with me to see if I could sell it for him. Of course, I had to probe him to find out the reasons why--if there was something wrong with the boat I sold him, or if he wasn't satisfied with the motor. He said, "No," every time he went water skiing, his wife and children got sick from the water. I won't mention the body of water, but it was near by here. So, he just decided to get out of the boating business because of water pollution. Of course, I think this is probably an extreme example, but it could be a very real example if all of us aren't involved in this matter of clean water. If I mentioned Evinrude a few times, it's not because I'm bragging. They say if you're telling the truth, you're not bragging. But, in 1972, all of the Evinrude outboard motors are drainless. What this means is that overboard fuel drains have been completely eliminated from Evinrude outboard motors. In years past, an outboard engine at slow speed or at idle would have a steady stream of a gas-oil mixture dripping directly into the water. If you take an outboard of three to five years old, tie it to the dock and idle it, you can see a steady stream of gas and oil dripping into the water. So, for 1972, all of these outboards are completely drainless. The fuel that once drained into the water is recycled into the engine resulting in cleaner water and greater efficiency of the engine. Being associated with Evinrude, I'm proud to say that this process was developed by Evinrude. In addition, they have offered this development or process royalty free to any and all

outboard manufacturers. Another example of improvements in outboard motors is the increase in horsepower and the decrease in size. For example, today's 125 horsepower engine is about 15 pounds lighter and about 37 percent smaller than the 100 horsepower engine of just four years ago. We find that more and more people are getting into boating for the first time. In the past, the majority of the purchases involved trade-ins or engines that were repowering the boats. Today, it is not unusual for a man to come into the yacht basin with his entire family, wife and children behind him, looking for a pleasure boat--something he can use for fishing but at the same time, something his entire family can enjoy.

I think another trend over the past five or six years in the small pleasure boats and recreational boating has been a drastic change in the hull designs. Of course, the biggest change is what we refer to as the cathedral-type hull. This type hull offers a much safer, stabler craft, especially for someone getting into boating for the first time. Most of your major lines of boat manufacturers, up to 19 to 20 foot, have almost eliminated the old deep V or conventional type hull from their line. Whenever I talk to someone about a boat, especially for the first time, I always invariably steer them toward this cathedral type hull because of the better ride and stability and safeness of the craft. With the trend of our economy, more and more younger working men are getting into recreational boating. As I attended the Evinrude dealer meeting yesterday, I was interested in finding out that Evinrude and their millions of dollars in advertising are gearing more and more of their advertising dollars toward the younger person. Recreational

boating is no longer limited to the professional worker, or to an older person who has saved for some time toward the purchase of his boat. For today's wage earner, credit is a way of life. Many young couples have a boat parked in the garage next to their car. Let me relate another example. A young medical student and his wife came over to our facility shopping for a boat. The conversation went back and forth--they were talking at the time about buying a house--since they were living in an apartment at the time. Of course, he had his eye on a boat; they were in and out of my place of business for several weeks. They finally placed an order with me for one of our 23-foot outboards powered with two outboard engines. By the time they bought the trailer and accessories, it amounted to well over \$6,000. They had come to an agreement, I guess he did and persuaded her, that the house would wait. They decided to go ahead and get this pleasure boat and use it and enjoy it.

All of these trends point to 1972 as being an even better year than 1970. We have been told that there has been an extraordinary amount of early buying in the Marine Trades Exhibit Conference in late September. Consumer earnings and expenditures on recreation is generally on the upswing. Economists tell us that within a decade, as much as 8 percent of the average family's income will be spent on recreation of one form or another. Of course, a lot of that is going to be in recreational boating, whether it be in selling, servicing, chartering, or however we are connected with recreational boating.



As we think about all of these boats in the water, recreational boating on the upswing, it comes to the point of the problem of storing the boats. At our facility, we have a dry storage system. I brought with me a small film relating to dry storage which runs about six to seven minutes. I'd like to show it at this time. Then we will talk for a few minutes on storing these boats.

#### FILM

This movie showed some of the operations of our dry storage over at the Galveston Yacht Basin. Within the last five or six years, this type of dry storage has mushroomed. With recreational boating on the upswing, we need to provide places for people to keep them. The dry storage system eliminates the need for extensive waterfront space for berths, loading ramps, piers, etc. This type of operation within a completely enclosed building virtually eliminates theft, pilferage, and wind damage, while the boats are in dry storage. Our storage building is approximately 165 feet by 180 feet. The storage racks in our building are adjustable, but we found it practical to set them to a determined setting and then leave them stationary. Of course, the runners the boats are stored on are adjustable, and they are adjusted to each individual hull. Our particular storage building has a capacity of 180 boats. At the present time, 95 of these boats are outboards, and 85 are inboard-outboards. However, I would say approximately 70 to 80 percent of the inboard-outboards in our dry storage are two years old or older. We limit the length of the boats kept in our building to 24 foot.

We maintain full capacity year around; however, we do have a few vacancies during the winter months. In the summer months, it's not unusual to have a waiting list of 30 to 50 names of people who are waiting to get into our dry storage.

So, there is a need for dry storage for people who have these boats. After all, one of the main reasons they purchase a boat is for pleasure. The dry storage system virtually eliminates the bothersome trouble of trailering a boat. I have customers who live just as close as Houston, and they say it saves them a minimum of 30 minutes driving time just reaching Galveston without having to trailer their rig. Of course, it eliminates the bother of finding a place to launch, saves time in launching, removes the responsibility of loading the boat when they get back from their fishing trip-- especially if they've had a good one. They're tired after fishing, and don't have to fool with loading their boat and cleaning it. We have a monthly and annual rental rate which ranges from \$20 to \$36 per month, depending on the length of the boat. Approximately 15 percent of our customers are on an annual basis--that is, where they pay a year's rental in advance, which runs about 10 percent less annually.

We offer complete repairs and services right on the premises. We are the authorized Evinrude dealer for Galveston and authorized OMC and Mercruiser service dealer. Of course, all of our services are offered to the general boating public. One of the main advantages from the boat-owners' point of view is the convenience in dry storage. With a boat in our dry storage facility, he merely makes a telephone call in advance and lets us know what time he will be down to use his boat. We take care of launching his boat, fueling it, servicing

it, checking the oil, or whatever other service he asks for at the time; and when he arrives, his boat is sitting in the water ready to go. He just steps into the boat and takes off. On his return trip, he leaves his boat at any one of our private piers in front of our dry storage building and leaves. We take care of cleaning his boat and putting it back inside the building. If he happens to want or need repairs, he merely leaves word or a work order, and we see to it that our service people take care of these repairs. He doesn't have to worry about hauling his rig across town to get an estimate on repair work or worry about getting a mechanic out to his dock to look at his boat. Everything for complete servicing and repairs is offered right on the premises. We also maintain on the premises a complete marine supply store with marine hardware and fishing tackle. Adjacent to our building is a complete bait stand for fishermen.

If anyone has any questions about small boats, outboard motors, or dry storage, I'll attempt to answer them.

Question: What do you charge to put a boat in the water?

Answer: We have a \$2.00 launching fee for boats up to 21 foot. For 22-24 foot boats, there's a \$2.50 launching fee that we charge. This is round-trip, and includes rinsing the boats off completely inside and out with fresh water. This is to get the salt off.

When we first opened our facility back in 1966, there were several dry storage facilities in our area which did not have a launching charge. Their rates, we felt, were extremely low. As

Mr. Harris pointed out, any time you're in the marine business, your expenses seem to be multiplied. The fork lift equipment is very expensive; maintenance on it is quite heavy. So, we have gone to a launching charge and have found no objection to it at all. Thank you.

#### INTRODUCTION OF MR. J. B. OLIVEROS

Next on our program is Maintenance and Repairs, and Wet Storage. I visited with Mr. Oliveros who is the owner of the Galveston Yacht Service. He's been in the boat business for many a year. He told me he built his very first boat at the age of sixteen. His granddaddy and his daddy used to build boats in the back yard. Back in 1930 sometime, he built his first cruiser, and had it until Hurricane Carla came through and destroyed it. If I tried to tell you all the expertise and experience he has, I would take all of his time, so I'll not try to do that. He has been here with the Galveston Yacht Service since 1959. So, Mr. Oliveros, if you want to take your hat off, (I want to tell you something about him. He says, "I'm like the man who has to take off his hat.) Go right ahead. I give you Mr. Oliveros.

## MAINTENANCE, REPAIRS, AND WET STORAGE

J. B. Oliveros  
Galveston Yacht Service, Inc.

Well, I am like the man with the hat; however, I didn't make any notes. When I first started in the yachting business (I'm going to start with wet storage facilities) the first facility I remember was at Kemah, Texas. There were two marine railways--we didn't have trailers in those days--and storage facilities for about 50 boats. Gene Platt had a complete service there, including carpenters, painters, and engine people. After the thirties, the boat business started looking up. Then, the war came along and put a "quietous" on pleasure boating for a while. Around 1939, Albert and Ernest Fay at Seabrook put in the Seabrook Shipyard. I left my own business and went to work with the Fays as their superintendent. We were building crash boats and sub-chasers for the U. S. Navy. Of course, I was a young man at that time, and I had sort of restless feet. After working a year in a navy yard, I came back and went to work for Brown Shipbuilding Company. Then, I went back to Seabrook, where I stayed for about 15 years. The opportunity presented itself for me to come to Galveston. Mr. Bob Smith spent \$5½ million building the Galveston Yacht Basin. I was fortunate enough to get the service facilities of it. So, we incorporated the Galveston Yacht Service, and we're Chris-Craft dealers. We serve the general

yachting public with complete service for anything they want on their boat. That's sort of a picture of the storage facilities around the country. Now there are many, many more of them. There is Watergate Yachting Community, the Clear Lake Yacht Basin, Seabrook Shipyard, and others.

Are there questions anyone would like to ask about wet storage?

Question: Recently I received a notice from a paper in Florida about people putting red pepper in the bottom paints for boats for the purpose of reducing barnacle collection. As a result, the boat needed to be pulled out of the water only once a year. Can you enlighten me on this subject?

Answer: Red pepper? That's a new one on me. Well, it may work. However, there's a lot of money being spent on anti-fouling coatings for boat bottoms. Some of them are tops on the market and some of them are not so good. Of course, if you get quality, you have to pay for it. We don't put anything but the best on a customer's boat. We ask him what kind of bottom paint he would like on his boat. If he specifies, fine. If he says, "I'll leave it to your judgement," we go ahead and paint it with a good grade of bottom paint. If you have a wooden hull, you can't leave the boat in the water a year without asking for trouble, because if you should happen to ground it or if something knocks the paint off the wooden part of the boat, the marine borer can do a darn good job of causing an expensive repair job. So, the best thing to do is to haul a boat at least twice a year; if it were my boat, I'd haul it four times a year.

However, a lot of people don't believe in spending that much money on it.

Question: Approximately how long does it take marine growth to start on a boat that is left in the water?

Answer: The biggest problem of marine growth, with a boat in the water, is not to the hull or to the wooden part, but to the underwater appendages. We have many customers who come down and say, "Well, my boat won't run. What's the matter with it?" "It won't turn up but 2,500 or 2,000." Of course, the standard answer to that is, "You're going to have to haul it out and scrape the barnacles off the underwater appendages," which are the propellers, rudders, so forth. Actually, if a boat is used, the wheel is turned and you don't have too much of a problem with that. Grass doesn't grow on a busy street.

Question: Do you have a build-up on the hull of the plastic of fiberglass boats as bad as on wood?

Answer: I think the barnacles like fiberglass better than they do wood. That's what we've found. However, if the hull is properly painted, they'll stay off pretty well.

Question: You do paint the fiberglass?

Answer: Oh yes. When fiberglass first started coming out, everybody thought that since they had a fiberglass boat, the worms wouldn't bother it. So they would just leave it in the water. That was a

big mistake because it's more expensive to clean one without any anti-foulant on it than it is to clean one that has been properly painted in the first place.

There are many facets of the marine business. Consider hulls; we still have wooden construction, which I like the best. Your new boats manufactured by the larger companies like Chris-Craft, Owens, some of the others, have all gone to fiberglass and quit building with wood. Especially in the sail boats. I don't know whether we have any sailors in here, but I've seen almost all of the wood sailing vessels disappear from the market, and now nearly everything is fiberglass. Due to the great stress of the mast, sails, and rigging on a wooden hull, fiberglass has eliminated the problems that a sail boater seems to have with a plank wooden hull--caulking coming up, and the hull working. Even fiberglass will work if it's not properly constructed. Let me come back to the wooden hulls again. A hull properly built will last many years. I have a 39-footer in my shop which I acquired from my uncle. I built it 24 years ago. He's dead now, but the boat's still living. The boat was in very excellent condition. He powered it with a pair of diesel engines. It had monel fastenings, was built with inner planking a quarter of an inch thick with balloon cloth and double planking compound in between the two layers of planking. The outside planking was 7/8 inch thick Florida White Cedar, which we call juniper. This stuff will never rot and worms don't like it. Your fiberglass hulls are easier to repair. In fact, we had a Chris-Craft here several years ago that belonged to a local doctor. His son and a bunch of interns took it out and ran it up on an iron



bulkhead over at Pelican Island and knocked a hole in it that you could walk through. However, the hole was above the water line, so they just left it there. I think the Coast Guard was kind enough to pick it up and take it in. The next morning, we went over, got it and repaired it.

Question: I'm interested in what you would do for preventive maintenance. What would you recommend on a fiberglass or wood hull?

Answer: Well, we'll take them one at a time. A wooden hull requires a protective finish, which necessitates hauling, blocking, sanding and painting the top sides of the decks and the cabin. If it's varnished, then that's another problem. As a rule, the varnish on the yachts today is extinct. They don't use it any more. Just a little bit of trim, because it gets in the sun and salt water and unless you have a man to maintain it and put a coat of varnish on it every month, well, it's just no good. On a fiberglass hull, the thing to do with it is to compound it with a regular body compound and wax it. If you ever waxed the varnished surface on a wooden boat, you never could do anything with it after that. You would have to take it off to the bare wood and start over again. That's all changed with fiberglass hulls. Fiberglass hulls ought to be waxed about every three or four months, or whenever you haul out. A lot of people haul out only once a year.

We have the bright work which is mostly stainless steel nowadays, with some brass, but not as much as it used to be. We have aluminum too. The aluminum, believe it or not, can be maintained by using baby oil on it after you clean it. That protects it from the salt water and corrosion that accumulates.

Question: Just standard Johnson Baby Oil?

Answer: Yes, sir, just plain Johnson's Baby Oil.

As for stainless steel, of course, there are different kinds of material to clean it and it's sort of self-polishing. You can protect it by a light film of some kind. There are quite a few things on the market that help.

Question: I was just thinking of maintenance in relation to taking my automobile for the 6,000 mile check-up. I just say here it is, do what needs to be done. I was wondering if they do the same way for a boat, just take it in and say, "Mr. Oliveros, take care of it"?

Answer: Well, we like to have those kind of customers, but they're few and far between. You don't dare to do anything on a boat unless you have a signed work order, or else you're liable to end up in court over it. Just do what's on the work order and be sure you do it right because, believe it or not, your boat yard is liable even after the boat leaves the dock. You can get sued.

Question: Mr. Oliveros, regarding protective films--there are a number of them on the market such as LPV, WD-40, and others. In your experience for preventive maintenance on various metal parts of the boat, is any one better than another, or do you have any particular preference?

Answer: WD-40 doesn't seem to be as good as some of the others, but just a little keeping of the salt off of it and a little oily rag with some of that material on it does the job. There are some good polishes that have a film in them that will help.

Question: I detected something you said a moment ago, that you might have insinuated that monel is on its way out. Is monel still used as much in fixtures on some of the boats as it used to be?

Answer: It's not used as extensively and the reason for that is that it has been hard to come by. Monel is the finest material you can use for shafting, and I prefer it to the stainless materials they're using now. They're using 17-4 PH and there's another one that recently came out that the Corps of Engineers is using. Of course, stainless has a little more tensile strength, but I much prefer monel to any other materials for shafting and for fasteners for that matter, but it is expensive. There's some Japanese material on the market, and I think we have some. We had some new shafts made and couldn't even keep the propeller nuts on tight. We usually use a lock nut and a cotter key.

At our facility, we have a device for straightening propeller shafts. We have a hydraulic ram on a piece of steel H-beam about 20 feet long, and we use an extra heavy iron pipe sleeve when we have one bent in the taper. We take an old propeller and cut the hub off it and cut the blades off the hub, use it to protect it. So, you have one place in the middle of the device for the hydraulic ram and on the end when you have the shaft bent in the taper, which is the most common type of shaft bend that comes in. We use a hydraulic jack and these sleeves. Then you finish it off with a dial indicator. You can get one within about 2/1000's that'll run real good. You'll never know the difference.

Also, we have a device over at the plant that we had made up. We use a pair of hydraulic cylinders with a sleeve that's cut about 10/1000's less than the size of the shaft bearing. We have a hydraulic pump and we set the pinch clamp on one side of the shaft and this pusher on the other side. Of course, it has a couple of rods to lock it so you won't push the strut off and you just pump that bearing out of there in about 15 minutes. That eliminates a lot of time spent in going inside the boat and trying to get rusted bolts and stuff like that loose on a poorly maintained boat where they let the salt water get up on the shaft coupling and rust up everything. Sometimes, you would pull the shaft and you'd have to pull the rudder too, and then the owner would come down and wonder why it cost him so much money to get his boat fixed. So, what I do in my place of business, I sort of walk around and try to figure out something that I can do that will make the cost of operation a lot less; I think I've helped quite a bit, because I don't know of any other boat yard in this area that has some of the equipment that we have. We have an Algonac type hoist that we started out with in 1959. It came with cables and three straps which go around the hull of a boat. Later, we made some keel blocks out of some H beams with adjustable chocks so we could haul a heavy boat upon it without damaging the chines. We can handle 65 foot boats.

Question: Regarding requirements coming up nowadays pertaining to holding tanks, what is the status of these regulations? What is the availability of dump stations?

Answer: Well, all we hear about it now is from the advertisers, and what they're going to do. They haven't put out anything with any teeth in it. I'm sure it will be the marina operators' obligation to put a pump-out tank in their equipment. As far as I know, most all your boats in the area have no holding tanks, except one or two new boats that have been sold. Occasionally they come up and want to get their tank pumped out, but there are no facilities for it. Until that's clarified and until they do something about making it work, nothing will be done.

Question: Will there eventually be federal legislation on this?

Answer: I'm sure that eventually holding tanks will be required on every boat that has a head. In some states, this is already required. On those which do not have a tank, a seal is put on the toilet and they are not permitted to use them. This, I believe, is effective in Florida. Texas does require holding tanks on fresh water lakes and reservoirs. However, the boat owners say they're not going to do anything until the issue is enforced. When it's required and the change-over is made, I think the marina operators will step in and have the facilities for these holding tanks. But, when there are 500, 600, or 700 boats over there and only two or three of them have holding tanks, it wouldn't pay to put in this type of machinery. That's the way it stands now. There are only very few boats in the area that have any holding tanks on them.

I think eventually this will be required in open water. The big argument about pollution now is that they're blaming it all on

big industry and the cities. That's only partially the fault. This is not a part of my subject, but I've made a trip from Key Allegro at Fulton, Texas, in a 38 foot Chris-Craft that had been laid up for about a year. We had problems with it and had to get towed into Seadrift. I noticed that back in the bay from the Intracoastal Canal, toward the town of Seadrift, the big shell dredges are really getting with it. The more they work, the more they spoil our bays, but like I say, that's something else.

Question: This is a little bit off the subject maybe, but with so much of our coast line being taken up now and available anchorages that are being turned into marinas and residential areas and pleasure areas and so on, I've heard that this is having a tremendous effect on our marine life. Is our pleasure boating going to eventually cause us to have to go to shrimp farms and cat fish farms and so on to raise marine life, or can we do it?

Answer: I don't know. Some of these people from A&M can probably answer that question.

Mr. John Douglas: Mr. Oliveros, about a year ago I did some research and received some information from one of our engine manufacturers. This is under study. In Wisconsin, or one of the northern states, there is a test lake (and also one in Florida) where around-the-clock testing of the effect of boating on marine life, not only from a pollution aspect, but from the noise and other aspects created by boating is being conducted. These companies that are in the recreational business are concerned about the problem. This is

their livelihood. This would be like the automobile business without any roads. Recently, another dry boat storage operator and I were discussing the reduction of the in/outs of our boats over the last couple of years, and it was agreed that one of the primary reasons in the drop is fishing. So, people in the recreational boating business are concerned about it and there is a great deal of money being spent in the research.

Mr. J. B. Oliveros: We get back to another part of the recreational boating industry that I haven't mentioned, and this is engines. As you know, this boat that we brought from Key Allegro at Fulton had been set up for about a year and hadn't been run. Most boat people, when they come down to enjoy a weekend of boating, want to get in that boat and have no problems with it. I'll say this, on Saturday or Sunday or any time during the end of the week, we have to have a full staff of mechanics on duty because most people don't really maintain their engine like they should. You have to run them.

Back to the boat we brought back from Key Allegro--I was going to call the Coast Guard and see if they would come out there and give me a hand or bring us a battery. The radio wasn't working. But, the radio/telephone is a wonderful thing when you need it. I don't ever use one to converse on. I use it when I need it, only. We've got some new regulations coming up. Anybody that doesn't have a station license by the end of December is just out of luck getting one. They're going to a smaller radio and your range is not going to be nearly as good. I don't know what the purpose of that is,

but it's going to be pretty rough. However, your station license will be good for five years if you get it. Is that correct, Captain?

Captain Goolishian: It's either January 1 or January 21, I can't remember the date. There will be no new licenses for an AM radio/telephone.

Mr. Oliveros: You can hardly buy an AM radio/telephone now. The manufacturers quit building them on account of the new regulations.

Captain Goolishian: You can go single sight band.

Mr. Oliveros: Well, that's about \$1,500 and there aren't many yacht people who want to spend \$1,500 unless they've got a lot of money.

Question: May I ask a question about wet storage? Have you ever come across the problem of people abandoning small boats in your area? If so, what do you do?

Answer: Yes. An abandoned boat is a nuisance to us, pumping it out; so, we just haul it out and set it on the bank.

Question: Then what?

Answer: Well, first we try to contact the owner. If you have any bill against it or anything like that, you have to go through legal procedures to acquire the boat, if that's necessary. This requires getting a lawyer who knows what he's doing, or you'll get sued for that. I talk like I've been sued a few times. I was sued for a boat



sinking offshore and all we did to it was haul it, replace the zincs and paint the bottom. Believe it or not, it cost us about \$2,500. The man didn't drown. He died of a heart attack; there were four of them. This happened about five or six years ago.

Another thing a marina operator just doesn't do. He doesn't let a boat sink at the dock. You can get sued for that, too. Just don't let one sink at the dock. If you see one sinking, notify the owner and go haul the boat out. Well, we've had a lot of experience with boats sinking at the dock, and a few times, we might have been responsible, but my staff over there knows what to do when they put one in the water, and if we're responsible for it, we'll look after it. We don't like to have those things happen. Any other questions now?

Well, that concludes what I have to say unless anybody would like to ask any more questions. I'll be happy to try to answer them. I didn't prepare anything for this. I've been pretty well tied up. I hope that I've enlightened you a little bit and made it interesting enough. If so, I want to thank you.

#### INTRODUCTION OF DR. H. A. GOOLISHIAN

Our next topic is Boating Safety. I put it last very purposefully. I think it is one of the most important aspects of recreational boating.

I continue to go back to my initial meeting for this recreational boating seminar with Mr. Purdy of the Chamber of Commerce. I came down one Monday morning, bright and early. There

was this vivacious, lively young lady to meet with us, who was introduced as Mrs. Goolishian. She indoctrinated me on this United States Coast Guard Auxiliary group, and told me that she and her husband were charter members of Flotilla 66. I was really impressed because I knew nothing at all about Flotilla 66 or any other Flotilla. (We have some members from 61.) She was most helpful. She said, "My husband is the Flotilla Commander for 1971 and 1972, and he would be more than happy to come and tell you all you need to know about boating safety." He did not know this at the time; he was out of town.

Dr. Goolishian is Director of the Clinical Psychology Division of the Department of Neurology and Psychiatry, University of Texas Medical Branch. He is the authority on boating safety.

Dr. Goolishian, we're delighted to have you with us today.

## BOATING SAFETY

Harold A. Goolishian, Ph. D.  
Director of Clinical Psychology Division  
Department of Neurology and Psychiatry  
University of Texas Medical Branch  
Commander, Flotilla 66, USCGA

Thank you. This is one of the penalties for leaving town. I'm not really an authority on boating safety. My wife is kind of prejudiced. There are a few other authorities here. We have Captain Early from the Coast Guard and I'm sure that if I don't know it, he does. If he doesn't, Division Captain Smith from the Coast Guard Auxiliary will. Maybe those gentlemen will also help out in this.

Rather than being the authority in boating safety, I think of myself more as a consultant on boating safety. It reminds me of a story I know that defines what a consultant is. A man had this pet Siamese cat which was very beautiful. But he was out every night howling and knocking over garbage cans and the neighbors were quite furious because he was waking them up. The garbage was spilled all over the back, and they were quite mad at this man. So, in order to keep peace, he went down and consulted with his veterinarian and asked what to do about it. The vet said, "Oh, it's very simple. There's a very simple little operation, just sort of snip, snip and it's all fixed up." Well, with some reluctance, he agreed to the operation and it was performed. He brought the cat back home, feeling that he had made for community peace and safety. That night, the

cat was back out raising just as much fuss as before and the neighbors were just as furious. Of course, the man was quite angry and went right back to the vet thinking he might sue him. He was telling the vet his problems and thought he might fix him up. The vet said, "He's all fixed." The guy said, "No, he's not. He's just as bad as before." The vet said, "I know, but there's a difference." The man said, "What do you mean there's a difference?" The vet said, "He's in a consultant capacity now." So, I'll be a consultant this morning.

First, I would like to tell you a little bit about boating safety. There are a few organizations, as you well know, that are concerned with boating safety. The Coast Guard Auxiliary is one of them. It is a volunteer civilian organization associated with the Coast Guard, made up of people who are concerned with boating and boating safety, who volunteer their time in a variety of areas to do something about it. They generally work in three major areas: (1) operational activities, this would include such things as safety patrols, marine patrols, search and rescue activities; (2) public education, this would include a variety of different types of public education courses in the area of boating safety ranging from one lesson of simple courses and outboard handling to rather lengthy eight and ten and twelve-lesson courses on basic seamanship. They feel very strongly, and I think very wisely, that the more the boat owners know about boats they're handling--the equipment, the elements associated with boating, the safer boater they will be. It's one thing to have this rapid rise and interest in recreational boating, but the fact of the matter is, most of these new boaters don't know the first thing about the boats they buy, how to handle them, or the

water they're going to operate them in. The purpose of the public education program of the Coast Guard Auxiliary is to reach as many of these boaters as they can in an educational sense to make them as safe a boater as they can; and (3) courtesy motor boat examination, the award of the so-called safety decal.

I'm sure you're all familiar with the pictures which are around the room. A boat that meets the requirements of the Coast Guard Auxiliary with reference to minimum safety equipment will be awarded this decal by a member of the Auxiliary. Those of you who are in the boating business ought to familiarize yourself pretty much with these requirements because we're interested in safe boating, and safe boating is good business. There isn't anything in the way of equipment that doesn't have to be sold, installed, put on the boat, and it is good business for the boat dealer and it's also good safe boating. That way, there is quite a marriage between the two. Safe boating is a very complicated business. It involves how much knowledge the boater has; it involves the equipment he is using; it involves the weather and the water, navigation aids, and the ability of various kinds of assistance. There is no way to go into all of these, but I think perhaps some of you at least may be interested in knowing what some of the legal requirements on a boat which are both at a federal level and at the state level, those which these governmental bodies consider to be the necessary minimum amounts of equipment to consider a boat safe for operational purposes, assuming that the operator is a safe operator.

### The Texas Water Safety Act

There have been some changes in laws. For instance, most of you are aware of the fact that the legislature here in Texas just recently revised and passed a whole new boating act called the Texas Water Safety Act. There have been some rather important changes, I think, in boating requirements as a result of this act which becomes effective January 1. In essence, the bulk of this act is to bring the requirements of the Texas laws with reference to boating and motor boating in line with federal regulations, as well as adding a few additional requirements of their own.

One of the major changes that you will be getting questions on from those with whom you will be doing business is with reference to the numbering--the registration of boats. With some exceptions, all boats unless they're documented, that are propelled by machinery of any kind will now be required to be registered with the familiar TX numbers. As you may recall in the past, a boat that was ten foot or less and under ten horse power was not required to be registered. Now all boats propelled by any machinery will be required to be registered, regardless of the size of the motor and regardless of the length of the boat, unless they are specifically exempted, such as a life boat on another vessel. Under the requirements of this new act, sail boats, for instance, will be required to be registered if they have auxiliary motors. In addition, the registration has been or will be passed over to the Texas Parks and Wildlife and taken out of the Department of Highways, whatever it is, the motor vehicle registration group; and Texas Parks and Wildlife Department

will be handling the boating registration and the administration of this law beginning January 1. The new registration for boats will be for a period of two years, and they will be priced according to the size of the boat under the Texas law. The prices, I believe, under the new registration system will be:

Class A Boat--Less than 16 feet	\$ 6.00
Class 1 Boat--16 feet to less than 26 feet	9.00
Class 2 Boat--26 feet to less than 40 feet	12.00
Class 3 Boat--40 feet plus	15.00

As I understand it, the new registration decal will be in the shape of the State of Texas, made of vinyl. It will be a validation stamp issued every two years. It probably will be patterned after the automobile safety sticker with a color change, dated, etc., so that just by a glance an inspector can ascertain whether or not the inspection is current. All boats that are in operation and that are registered, regardless of size, will be required to meet the minimum standards with reference to lighting under the requirements of the inland rules for the road, including Class A boats.

There are a few other changes in the law. All children twelve years and under, I'm not sure why that age was selected, will be required to wear, not have available, but to wear a Coast Guard approved life preserver. I don't think the people who wrote this law knew exactly what a life preserver was. In talking with personnel of the Texas Parks and Wildlife Commission, I have been informed they interpret that to mean any type of Coast Guard approved life vest, whether it be a bouyant vest or life preserver as officially defined. But the law does state life preserver.

The new law will also require that all boats that operate between sunset and sunrise carry a lantern or flashlight which can be made immediately available in order to prevent collisions; so your flashlight sales ought to be going up.

Any sailboat that carries propulsion machinery of any kind will be required to register as if it's a motor boat, and will be required to carry the lights and other safety equipment required of a motor boat.

There are many other sections to this law. It's going to take quite a while to digest it. I don't think we know yet exactly what the effect of it will be until the regulations and promulgations and what not come out with reference to it. But that is the new Texas Water Safety Act and something we're going to be living with for quite a long while, I think. I doubt if the standards will become less. If anything, they'll probably become more rigid and more severe as the numbers of boats that are operating in the state increase.

#### Federal Requirements

With reference to federal requirements, there are a number. Most of you may be familiar with them. Again, these requirements, as with the state law, will vary with the size of the boat in terms of its determined class: A, 1, 2, or 3. The federal regulations require that the boats be numbered. Of course, the numbering system which the State of Texas has adopted will satisfy that requirement. These numbers must be properly displayed and the registration must be available for examination. There is a conflict here between the



federal requirement and the state requirement. As the state law is written, the registration form does not have to be in the physical possession of the person at the time he is operating the boat but must be made available. The federal requirement is that the registration document must be available and physically on the boat.

There are ventilation requirements. These, of course, vary with the type of engine and installation, but in essence, they deal with the carrying off of fumes and explosive airs of one kind or another, and pretty specific with reference to the kind and size of boat. All inboard engines have to have backfire flame controls and all boats propelled by machinery (to comply with both the state and federal laws) will be required to carry some kind of fire fighting equipment. In general, for smaller boats this is the B-1 type of equipment, the small marine Coast Guard approved fire extinguishers. Larger extinguishers or fixed fire extinguishing equipment will be required in your larger inboards. The requirements of the state now agree with the requirements of the federal government with reference to the bells, whistles, and horns, again with reference to the size and type of boat that you're talking about. For life-saving devices, there must be a minimum of one Coast Guard approved life saving device readily available for every person on board. On boats with berths, there has to be one approved life saving device for every berth, but not less than the number of people on board.

Now, those are the general requirements. I can go into greater detail on any one of them if there are any questions.

In addition, the Coast Guard Auxiliary has, in order for a boat to be awarded the courtesy decal as being a safe boat, an additional

number of requirements that it considers basically necessary. These are:

1. Life saving devices--There must be at least as many approved life-saving devices of the type required for the class of boat as there are berths.

2. Fire extinguishers--The fire extinguishers must be aboard, according to the Water Safety Act.

3. Navigation lights--Navigation lights are now required by the Texas law and also for the award of the decal.

4. Distress flares--One item that most boat owners don't have on board and is required for the decal from the Coast Guard Auxiliary are distress flares. Distress flares are something awfully hard to pick up at marinas. They don't seem to carry them; boat owners don't seem to realize that they are required; and I suspect that we turn away, at least I personally turn more boats down with reference to not awarding a decal because the distress flares were not on board than for any other single reason. There must be a minimum capacity of thirty minutes of distress flares on board to be awarded the decal. They have to be in good shape. These things, unfortunately, are not packaged ordinarily in waterproof packing. Generally, there are three ten minute flares in a little plastic bag. Water gets in and they melt. I wish somebody in the boating business would put out some type of water-tight container for those flares so they would last some period of time. If you're aware of the fact that these distress flares are available, I think you can sell them to your customers.

5. Galley stove regulations--If the galley stove is carried, it must be securely mounted so that it cannot shift position in any way. It can't just be sitting on a counter. Stoves must be installed in such a way that no flammable material in the vicinity can be ignited by the stove and generally speaking, any of the common types of fuel are acceptable, excepting gasoline. A gasoline stove or the caddy-pack butane tanks are not permissible.

6. Fuel tanks--Permanently installed fuel tanks on boats for the award of the decal must be securely mounted and must be mounted in such a way that they can't shift position.

7. Venting--The boats must be vented in such a way that they pass this examination and the fuel tank fill pipe that leads to a permanently installed fuel tank must fit into a filling plate on the deck outside the cockpit in such a way that it insures that any gasoline being loaded on that boat, if it spills, will spill overboard rather than into the boat. Any tank or container on a boat which exceeds seven gallons is not classified as portable and must be mounted as if it is a fixed tank to be awarded the auxiliary decal. Of course, there are such things as the carburetor drip pan and backfire flame control that are required on inboard engines.

8. Miscellaneous--The whistle and sound producing devices are also now required by the Texas Water Safety Act. As a matter of fact, it was amazing to me as I read through the Texas Water Safety Act, how many of the Coast Guard Auxiliary requirements are now written into the Texas law. So, although these are additional requirements beyond the minimum requirements of the federal statute, these written into the Texas Water Safety Act will now be legal requirements for a boat to operate in this state.

So is electrical insulation, and this is always a bug-a-boo. The wiring, in order to be awarded the safety decal, must be in good condition; must be properly installed, and must not have open knife switches located in the bilge. It's amazing when you look into the bilge of the boat, to find knife switches open to spark which could blow the boat up.

To be awarded the decal, the boat must also have sufficient amount of anchor line. The anchor line must be adequate in length with reference to the general use of the boat and, normally, this would be between five to eight times as long as the ordinary anchorage depth of water the boat is operated in.

In general, the boat must be in good seaworthy condition to be awarded the safety decal. This year, the Auxiliary will probably mount one of the most intensive courtesy examinations throughout this whole area which has ever been undertaken. We hope to be able to examine more boats this year than we ever have, in order to promote boating safety.

There are a number of other recommended aspects of equipment and conditions of boats, etc., that the boat owners should know about. I think that those of you in the boating business should review these items because it's good safety and, as I said earlier, it is also good business. For instance, boats should carry fully-equipped first aid kits. Although these are not required by either state or federal statute, it is good sense to carry such material. Boats should have spare parts and tools on board for ordinary, normal, minimal repairs that the boat owner can do himself to get under way

again. All boats should have safe loading plates fixed on them at the time of manufacture, so that the boat owner can refer to it. I believe safe loading plates may be required by the new Texas law; however, I'm not sure of this.

#### The Federal Boat Safety Act of 1971

In addition to these laws, there has also been passed a law which is probably more permissive in nature at this time, but ultimately will have more effect on boating manufacture, boating equipment, and safety regulations with reference to boating equipment than any other law yet passed. That is the Federal Boat Safety Act of 1971 which was signed into law this last August. Specifically, this new federal act provides authority for the Coast Guard to establish minimum construction standards for boats and associated equipment. It will provide uniformity for individual state boating safety programs and will authorize financial assistance from the federal government to the states in order to effect these safety programs. The law also provides for the establishment of a boating safety advisory council at the federal level. This council will be composed of representatives of the boating industry, state and local government, and general boating public. This boating advisory council is to advise the Secretary of Transportation and Commandant of the Coast Guard on matters relating to recreational boating safety. The Coast Guard, under this law, is granted the authority to prescribe minimum construction standards to the extent necessary that the safest possible boat and equipment reach the boating public. Under

this law, the burden of compliance with these regulations as they will be adopted will fall on all levels of boating usage. The manufacturer, the dealer, and the boat owner himself will be required to abide by these regulations. These regulations, as I understand it, will ultimately become quite pervasive with reference to minimum standards for all types of boating equipment. There are some safe guards built into it. Everyone's afraid of the federal government acting capriciously or arbitrarily with reference to regulations. They're going to be demonstrating a need for whatever standards and regulations that they propose. They will require the advice of the safety advisory council before a regulation goes into effect. But this new federal law, over the next several years, will become one of the most pervasive regulatory laws with reference to recreational boating insofar as it is concerned with the type of boating construction and equipment that will be allowed on boats.

I wanted to make one other announcement before we had questions. The Coast Guard Auxiliary will be holding a twelve lesson public education course beginning January 18, 1972, at Gulfgate Auditorium. This will be a ten week course. The meetings will last from 7:30 p.m. to 9:30 p.m. and will be in the area of safe boating, basic seamanship, etc. Those who participate in this course and complete the work assigned will be eligible for licensing to carry six passengers or less in a vessel fifteen gross tons or less. So, it will be a fairly intensive course for those of you who are interested in learning something about this or advising others.

Well, that's a very brief review of some of the laws and regulations, recommendations with reference to boating and boating equipment, and a very brief review of the new Texas Water Safety Act. I'd be glad to try to answer any questions on any of this that you might have.

Question: Where can I write to get a copy of the federal requirements and also the Texas Act?

Answer: You can get a copy of the Texas Act from the Texas Parks and Wildlife Department, John Reagan Building, Austin, Texas. The requirements of the federal government, you can get from a brochure that's right over there. There are several of these on the table. You are welcome to take as many of these as you want. This is an outline of the federal requirements. If you require something in greater depth than this, I'm sure you could get a copy of the boating act from your congressman if you wanted the actual law itself. Or, if you want a digest of the new Texas Water Safety Act, I have one here I'd be glad to give you.

For those of you that are in the boating business, marina dealers, and others, the Coast Guard Auxiliary has a good bit of literature and equipment, material, posters, and other such things that talk about boating safety, the Auxiliary, the courtesy decal, and things of this sort. If you're interested in getting any of this, contact the Flotilla closest to you and they'll provide this material which you can make available to your customers.

The variations in standards at the manufacturing level with reference to very simple elements of safety, ventilation, and things

of this sort are unbelievable. Of course, this is one of the purposes of the new federal act to look into this and to propose regulations and standards for all of this.

Comment: Some manufacturers put aluminum tanks on a boat. In a short time, the gasoline will eat it up and you've got fumes from the gas.

Answer: I think the fumes from a cup of gasoline are probably equivalent to the explosive power of a case of dynamite, or something of that order.

Question: Do you know the relationship that you might set up between accidents on the water, as such, and automobile accidents, as such? Do you have more per mile or hour logged in a boat, or is it safer in a boat than it is to drive down the highway?

Answer: I don't have figures on that. I think the boating fatalities in the last reported year were in the neighborhood of 1,400 to 1,500. Those were fatalities. I'm not sure how many other types of injuries there were. I can't really give you the comparison on that. I can tell you the fatalities there are per horse mile, actually 3/10 of one percent. I just happened to read that last night, and I collect little facts. But, I can't make that comparison for you.

Question: This figure, of course, is national?

Answer: Yes, national. And, of course, fatalities on the highway, I think, were up to 60,000 at this time.



Question: That's fatalities. What about injuries?

Answer: This, I have no data on at all. Captain Smith, do you have anything on that?

Captain Robert Smith: It was brought out in a conference. You'd be surprised to know that with the tremendous growth in boat sales within the past three years, the accident rate has maintained the same level or fallen just a little bit lower. I think, like Dr. Goolishian says, education is what we need. It'll help keep these figures down low.

Dr. Goolishian: So, you're saying that it's actually plateaued during the last few years.

Captain Smith: Sure has. The boat population is growing every year.

Question: What alarms me is to see 12-14 year-old kids dashing around the bayou in outboard motor boats. You have to have a license, of course, to drive a motor vehicle on the streets, but is there such a comparable license for boats?

Answer: There is no boat operators license for pleasure boating. There is, obviously, for commercial boating. But with reference to pleasure boating, there is no boat operator's license at the present time. This is a subject, I understand, that has been discussed frequently at various conferences and at various levels of government. I think, probably, and again this is a personal opinion, this is again being seriously reconsidered. The argument against boat

operator's licenses for recreational boating is that there is no guarantee of any kind of continued safe use or exercise of the boat, or maintenance of competency in operating the boat. Probably, the biggest argument for it is that something might be able to be done about people who are obviously incompetent, such as very young children by not issuing licenses or requiring minimum ages for licenses to prevent them from operating boats in unsafe ways. But, there is a counter argument for that. If you disallow the use of boats by very young children, you really would be creating a hardship in some areas with reference to recreation. The arguments go back and forth. As I understand, the issue is currently being seriously reconsidered, but not yet in any way being proposed. It is sometimes appalling, though, as this gentleman points out, to go down to one of these communities or boat communities and see the small boats tearing around there. It is amazing to me that we don't have more fatalities now than we have. It's just unbelievable. They get to water skiing at tremendously fast speeds and it's dangerous. But I think you're right. This is something I think will also be tremendously stressed over the next several years, particularly with the support of this new federal act. Our public education programs, not only the Auxiliary, but the power squadrons, American Red Cross, and other groups will be receiving tremendous amounts of additional support to encourage safe handling of boats.

Question: Have there been any indications that certain locations in this area could be considered as hot spots for accidents?

Answer: I'm not aware of statistics. I can only give you my personal impressions. Obviously, the jetties are hot spots.

Question: I was wondering about the Intracoastal Waterways (ICW) and some of the major arteries.

Answer: Well, I suspect, and again this is a personal impression, that probably the ICW is a relatively safe place because most of the pleasure boaters do not frequent that area.

Something that the Coast Guard put out with reference to the average boating fatality, as I recall, was about 10 years ago. They took all of the fatality statistics that came in and came up with a mean, an average. It was a man over 40 years of age with his first boat that was under 16 feet and was overloaded, not enough freeboard. I've seen this happen myself. A guy buys his first boat; he doesn't want to put too much money into it, or at least back then he didn't. He bought a 14-foot boat, put a big motor on it, loaded his whole family and several ice boxes and all his fishing tackle. The boat goes down and down in the water. This was before they had such floatation materials and such. He takes off, and the next thing you know, he swamps and down goes the boat.

Somebody was asking questions earlier about radios. Again, this is all up in the air with reference to no new licensing of AM radio/telephones. As I understand it, and I wouldn't want to be held to this legally, there will be no new station licenses after the first of the year. Station licenses in existence can be renewed for a five year period through or to 1977. But, they are

interpreting these regulations, as you apply for relicense, to include the fact that you must somehow-or-other be modifying the capability of your equipment, like adding new channels or adding VHF capabilities. There is a reluctance on behalf of the issuing body to renew a license when no modification in the capability of the radio has been made. So, it may be within a short period of time, in order to renew an AM license, you may either have to add additional crystals or add VHF capabilities in order to get your license through 1977. One of the biggest objections, of course, to VHF is the fact that it is "line-of-sight" transmission, and for the average boat this is relatively independent of power. The "line-of-sight" has more to do with how far away you are, and even though you increase the power by tremendous amounts, it just simply isn't going to make any difference. For the average boat with the antenna just a few feet above the water, you're talking about average transmissions in a ten to twelve mile range, not much farther than that. That is from boat to boat. Now, land-based antennas that are of some height, such as the Coast Guard Antenna, will be able to communicate with boats. So, a land-based antenna at an additional height, would be able to communicate with a boat, and the boat communicate back with that land station over a longer distance. But, probably, even under those circumstances, you're talking about maximum transmission ranges in the area of 18-25 miles, depending upon one thing or another-- the quality of the set, the antenna, and a few other things. So, you're talking about relatively limited ranges of communication for the average boat owner with a VHF set. The reason for this, of

course, is that the AM band has become so crowded and its range is so long that much of the over-crowding is due to overlapping communications from areas some distance apart. With the "line-of-sight" transmission, you'll be able to unjam the airways.

Question: Are there any federal or state restrictions per se regarding size of the boat and power unit on the boat as to what distance I can go out in the Gulf? For example, if I have a 15 horse power motor on a ten foot boat, can I go out ten miles?

Answer: Perfectly free to. You can go to Cuba if you want.

Question: But is the Coast Guard going to come by and tell me, "You're out here too far, it's too dangerous." Now what?

Answer: The state law makes reference to unsafe handling. Now, how that would be interpreted, and of course that would be limited to within the state boundaries (about 10 miles), I don't know. It is conceivable you might get a ticket from the Texas Parks and Wildlife Department or any other policing agency authorized to ticket boats under this new law.

Question: In adverse weather conditions, say small craft warnings are up or worse, if you have knowledge of a boat going out that you think it is dangerous to be out, do you notify the Coast Guard and have the matter looked into?

Answer: Well, let me try to answer this. To my knowledge, no. You can notify them, but you can't make them turn around and return to

shore. They can advise of the dangers, but they can't prevent from going out into them. We just know we're going to have a statistic.

Question: No one can stop a boat in the water and bring it back into port or anything?

Answer: He could go out in a hurricane if he wanted.

Comment: I have an example. Here last year, during the winter time, there were severe north winds blowing. This man and three children got in a very small outboard and took off. We called the Coast Guard to see if they could be brought back in, just for the safety of the children.

Answer: Well, you couldn't order them to do that. The only thing we would do is send a boat out there. If he's not aware of his problem, then the Coast Guard is going to be out there to try to convince him. This is all we would be able to do, so I would keep an eye on him if I can't stop him from going out.

Incidentally, in reference to weather, I wish this were something that was pushed more accurately by dealers. These very inexpensive and very small FM Japanese weather receivers can be purchased for relatively small amounts of money. The local weather station here broadcasts 24 hours a day. These sets sell for something within the range of \$10 to \$15, and are able to pick up the continuous weather broadcast, including a weather broadcast with reference to boating. I would personally love to see more boats carry such equipment on board and surely like to see those things pushed.

Comment: Another advantage of them is that the weather channel is not likely to be on your VHF radio or your AM equipment.

Answer: That's true. However, a lot of VHF radios are being sold to include that channel as a receiving channel.

Question: What about new boat sales? Is there anything or any safety material or pamphlets that goes with any of them?

Answer: In the past, we have had what we called a safe boating kit. We take all these pamphlets and we put them in an envelope and give them to the different boat dealers for distribution. We have run out of the envelopes, but do plan to get back into the program next year and get them distributed again.

I would strongly advise boat dealers to keep on hand pamphlets such as these that describe the courtesy decal. Go over it with the purchaser. There is a good bit of equipment that is not normally on the boat which the buyer doesn't think of buying. If you try to sell it to him, he'll just think you're trying to make a buck. But by using this literature, you can easily convince him that this is really required for his safety, and I think you'll find it very advantageous in promoting your own sales and his safety. Like flares. I doubt very much if the new boat owner ever has a flare on board.

Are there any other questions? If not, thank you.

Thank you so much, Dr. Goolishian. I hate to draw this session to a close without calling upon Captain Sam Early, Commanding Officer of the U. S. Coast Guard here in Galveston who may be able to cover items which we may have omitted. This is a brain-drain session; perhaps there are additional questions you want to direct to him.

Captain Sam Early,  
Commanding Officer  
U. S. Coast Guard  
Galveston, Texas

You know, there's only one thing that I would say about all of this, and of course, I've been exposed to it for a number of years now. That is, what we're hearing here today is really good, and by the number of people here who are involved, it is obvious they are interested in what is transpiring. But unfortunately, it's like being in church. When the preacher is up there preaching, it's not the people that are there before him that really need it-- it's those who are not there. That's what the misfortune is today. We have heard about boating safety, marine insurance, and repairs and storage of boats. The clowns who really need it didn't think it was necessary to be here today, most unfortunate.

Now, to turn to the Coast Guard. I would like to bring this point out and I have said this before, and members of the Coast Guard Auxiliary here already know this. My presence in the Coast Guard uniform today is the result of an auxiliarist back in 1941 or '42. Until that time, I knew there was an Auxiliary, but I didn't know there was a Coast Guard. I can say one thing, and I'd like to say this in giving credit to the Auxiliary today. Without them here, I can tell you one thing, that I could not handle the problems which arise. I do not have enough people nor facilities. We talk about the number of boats being sold today and being sailed out here. Dr. Goolishian mentioned



the trouble spot out here being the jetty. What he didn't say is this--without his group and the group of Houston there, and the assistance they give to me on the holidays and on weekends here, we could not provide the assistance to bring some of these people in who are in trouble out there. Many times, they are out there in trouble because of a lack of knowledge, or darn foolishness. That's all it amounts to. I am grateful to them for what they're doing; they're doing it right now even in this inclement weather. For the few that may be out there now, I don't have enough boats here at the base to cover the whole area and the traffic that's out there. Now, not having been prepared, I have nothing more to say, but if you have any questions that I am able to answer, I will do so.

There are two things I'd like to bring out, too. Someone asked where they could get these publications. Our district office and the Eighth Coast Guard District in New Orleans would have them. Or you may write to the Coast Guard headquarters in Washington, D. C., the Office of Boating Safety. They should have it. If they don't have an adequate supply, you could secure copies from the Government Printing Office. It's very easy to get materials from them. Of course, there is a charge.

Secondly, I would like to point out the importance of boating safety. Recognizing the amount of boating that is transpiring today, it became apparent to the Commandant of the U. S. Coast Guard three or four years ago, that it would be necessary to set up a specific office.

Now, to give you the structure of Coast Guard headquarters as it exists. There is a Commandant that is over a certain number of offices. Each office would be comparable to a Bureau in the Navy. You have heard of BuPers, BuOrd, things of this nature. Well, we call them offices. Office of Engineering, Personnel--that happened to be my field when I was up in headquarters--Operations, and things of this nature. A few years ago, they set up offices, each under an admiral. Under the office come the respective divisions, each having been charged with a particular category. They established the office of Boating Safety in headquarters under an admiral, and within the same office, the auxiliary plays a part. Last spring they restructured it. The new structure as it is now is most meaningful. It will become more meaningful as it goes on. It has been recognized not only by the Department of Transportation but also by the Commandant. The growing interest, growing concern, and the magnitude which is being demonstrated in this field today will probably result in its becoming one of our more important offices in the foreseeable future. Thank you.

## CLOSING REMARKS

Kathryn M. Delaune

Before we bring this seminar to a close, I would like to express my sincere appreciation to our speakers who have given so generously of their time in sharing with us their knowledge and experience in these designated areas. They have been most enlightening.

For general information, let me remind you that the dissemination of information for the purpose of accelerating growth and expansion of marine-related industries is the prime objective of the Marine Advisory Program. If any of us in the Industrial Economics Research Division or the Sea Grant Program can aid you in finding solutions to your problems, please do not hesitate to call upon us.

Lastly, I need to make this announcement. The boat show will be held in Houston January 8-16 in the Astrohall. Those of us who are interested in Recreational Boating will surely be there.

Are there any other announcements that need to be made?

The meeting is adjourned.