

WELCOME TO THE SEA ORG

*A lecture given on
16 October 1969*

Thank you.

Thank you.

And this is the 16th of October AD 19. Correct me if I'm wrong.

Well, there are a lot of things I could talk to you about. There are a lot of things going on. But what I want to talk to you about is drills, because that's recently one of the things I've seen goes out, and goes out very, very easily. And the basic way drills go out is people don't really know their purpose.

And about the most horrible thing I saw in the subject of drills—ghastly—I saw some people being conducted on a tour of a ship. And I said, "What are you doing?" And they said, "We're running drills." And so I said, "Well, maybe—all right." And the next day I saw this same tour and the same people and I said once more, "What are you doing?" And they said, "We're running drills."

Well, apparently "drill" had been downscaled to an idea that you took some people around and showed them the ship so that they would know where things were. And whereas that's commendable, that is your first familiarization thing on the AB Checksheet. And it didn't look to me like they were ready for drills.

Drills are just exactly this:

A disaster is something which has not been predicted or prepared for. And that is a disaster. A disaster is something that has not been predicted or prepared for, right?

Now, in line of the gruesome and horrible things I was telling you in the last talk about the fact that you have to learn . . . get the capability of predicting the result of not just the rag in the bilge but the generator run without water, and so forth—not only that, you have to be able to say with confidence that on this ship, if we had a fire . . . Remember, there's this platform. You don't walk out the front door and call the fire department, do you understand? You're right there and you have had it.

I think one of the last big fires that made history was some Greek vessel—down off the coast of Portugal, I think it was, or something like that; some Christmas holiday—and they had some god-awful death toll. The earliest one that I ran into—had anything much, at a vast distance, to do with—was the *Morro Castle*, which was a very famous disaster. Anyway, these ships burned right straight to the waterline and killed almost everybody aboard. This Greek vessel off of the coast not only didn't know their fire drill but apparently the idea was all the stewards got in the boats and rowed away.

I remember the *Andrea Doria*, I think, when ships came to her rescue while she was sinking, her boats were full of only cooks and stewards and there were no passengers in those boats, and the British seamen who were in the ships, and so on, which were standing by to help her wouldn't let them aboard. They turned them around and made them go back for passengers. Because by tradition of the sea, a cook or steward is a sailor and he is responsible for it as anything else.

Now, navalwise, there are various ways of going to sea. The two chief categories of them are going to sea foolishly and going to sea sensibly. And I'm, of course, talking mostly in the vein of going to sea sensibly. Naval vessels are normally sent to sea to be sunk or to sink. They're supposed to sink somebody else or be sunk or something like that. And they take relatively few precautions on these things with regard to the ship sinking. For instance, they don't have enough life rafts to take care of anybody, and when battleships turn over you see most of the crew has run down the hull and is on the inverted hull, when they're normally picked up, those that have been saved and so on. But they've just written it off as it isn't possible to provide lifeboats or life rafts for a thousand crew members. So, well, that's not possible to do that so to hell with it.

And then there's the commercial attitude of going to sea which is the passengers and so on, and that gets up to a fantastic point of the SOLAS Convention. And the SOLAS Convention is amongst the world's greatest idiocies. It's run at the UN by the British for the British shipyards. And Mary Sue figured out one time how this came about. New ships being built by any large fleet can, of course, put into them safety precautions which aren't normal to ships. And then they influence the SOLAS Convention to make those new regulations which puts all their competitors out of business. Their ships aren't built that way.

Well, we've actually found it to be the case that—I think a thirty-five pound beam down here one time with about ten pounds worth of welding that we were going to put in to strengthen a hatch . . . The shipyard estimate of that was three thousand pounds and it was being insisted upon by an inspector. All of which was very fascinating because the same inspector was insisting that we weld up our water doors on the main deck so no sea could get out of them if it ever came aboard.

So these guys get very unreal. But most commercial vessels simply drill on one basis, and that is "Abandon ship, abandon ship." And you'll get a commercial sailor and boy, he really knows how to abandon ship. He's got his lifeboat ticket and he just knows it right down to the ground, you know? And he can lower those boats, particularly in still, calm water—he'd never lower them in real water.

It's a lot of difference between putting a boat down in a harbor and putting a boat down running just a little six-foot swell. You'd be interested to know that if you don't let go those falls in exactly the right order when you're dumping up and down in one of these six-foot swells, somebody's going to get killed by that afterblock. The afterblock is run off just a split second before the forward block is, but they've both got to go and at that moment your crew with the oars in that boat have got to have those oars flat-bladed, right straight against the side of the ship and the moment those falls go, they shove. That gets the blocks out of the way and gets the ship out of the way, do you see? Otherwise those great big heavy steel blocks—your boat is rising and falling and going this way and that way and those great heavy steel blocks can crack somebody's skull so quick that you wouldn't think of it. It's a bit different putting them down in calm water and putting them down when a sea is running. Do you see?

So drills in the merchant service normally have to do with abandoning ship. Well, if you've got to abandon ship you already stink because you couldn't keep it afloat. So all the drills must be missing up to abandon ship. Now, this is no reason why you shouldn't know how to abandon ship. But the abandonment of a vessel is a confession that all other drills have failed. So if all other drills have failed then how do you expect the abandon ship drill to go off? That's not going to come off well, either.

The navy, on the other hand, because it can't abandon ship, has a tendency to specialize in the other drills and tends to ignore abandon ship because they haven't got any boats to abandon ship with anyhow. And they get . . . of course are subjected to, in actual service, a lot of damage. So they

tend to go out very strongly along the lines of damage control.

But the long and the short of it is that the only disasters they will have are those disasters which have not been predicted and billed and drilled. That's the only disasters they'll have. You can look over a ship and actually predict what disaster it'll have simply by finding out what nobody is drilled on, and sooner or later one or another of these disasters that nobody is drilled on—it'll happen and it'll be a disaster.

But a disaster or a mishap that simply happens will only become an emergency if it's billed and drilled for. And that's the difference between going to sea safely and going to sea at risk. If your ship knows its business, the crew knows its business on billing and drilling, you are really in very safe hands. And if the crew doesn't know its business, if somebody all of a sudden said, "We had a fire a while ago in the engine room. We put it out," and they think that's all right; brother, that is not all right. Yes, they have an estimation that they can put out that fire down there. Yes, the first thing you do is the guy who is on this ground does everything possible to put out that fire as instantly as he possibly can because fires, to the length of time they burn, become more ferocious. So it has to be put out early and quick.

All they did in that instance, however, was put out the fire in front of them. They did not do all of the other things necessary to make that safe. What if the guy had missed?

I was on a yacht one time—pretty good-sized one—down in Miami Bay and out in the middle of the bay the engine caught fire. And there was a rather brassy engineer—he was a good guy—and he was down there. What happened was a flash-back occurred. And this—again, this boat was just being moved from one place to another, and it wasn't in regular service. And this flash-back occurred in the carburetor and it was a petrol, or gasoline, engine and up went a tower of flame around the engine. And the engineer stayed there trying to cope with it, but the gas tank of this thing sat aft of the engine in a rather large engine room and the fire was running right along and was underneath the gas tank.

Well, the second I got an inkling of this . . . There weren't all that number of people aboard. There was then him and me and there were a couple of supernumeraries that didn't count—they didn't have anything to do with the ship—and I picked up one of these five-gallon fire extinguishers promptly, the first one in sight, turned it upside down, held it at the fire: nothing happened. It was empty. I rushed up along the deck, got another one, got it down, inverted it to put out the fire: it was empty. I went forward and got the third one, brought it down, upset it: bang! There was no cartridge in it.

This fire in the meanwhile was starting to devour the whole engine room. So I told this engineer, I said, "It isn't worth it. It is not worth it." I said, "Let her go." And he said, "No, I can do something about it." By that time the gas tank was practically glowing. And he actually, with a couple of sacks—I couldn't even get in there—he was in a small area that wasn't yet on fire and with a couple of sacks he actually beat it out. Suddenly it run out of oil or it ran out of something and he actually beat it out. I stood there ready to yank him out of there.

But I expected at any moment that we were going to decorate the entirety of Miami Harbor with fragments of that big yacht.

When you see a few things like this—the one I told you about the last time I talked to you, of course, was the first time I had ever laid hands on a yacht this life and I got . . . that educated me into inspecting rope and that sort of thing. And this next one educated me into the ferocity and speed with which fire can spread and that you don't keep around fire extinguishers which are empty.

If you have fire extinguishers around, make sure they are not only in correct quantity, but also are filled. And every now and then take all the fire extinguishers on the ship, make sure that you've got spare cartridges for all of them, and go around on a dock or out in a boat or get someplace on a well

deck where it won't make too much mess and just let the whole crew have a ball emptying every fire extinguisher on the vessel. At which moment you, of course, promptly fill them up because fate will usually time the fire after you've emptied them and till you fill them. And then you fill them all up again. It doesn't matter these tags they have on them.

So anyway, life cannot necessarily be interesting, it can be terribly uncomfortable when you run into things of this character.

But that, of course, was not predicted. That was a disaster, that big yacht was not a predicted disaster. In the first place, she was only going about a mile and a half to the shipyard to be refitted. And she got three-quarters of the mile of that distance and decided to burn up.

So you see, it is ships which are more or less out of commission which give you more trouble. Now, you'll probably—just prediction—you'll probably have more trouble with this ship after this refit than we had with it in any of the three months before the refit, because people will have changed things and so on.

Now, already, because they're not in regular service, just today they ran a generator without turning the water . . . the cooling water on and the generator started to go red hot and was fortunately caught and stopped and probably has not been badly damaged.

But look, we're sort of not operating, you get this, right now, we're sitting here in the middle of refit. Now, when we go back to sea, somebody will have moved this piece of rope and somebody will have moved that life ring, and this or that won't quite be where it was, don't you see? And you're not set up, really, operationally. It takes a little while to set up a ship where people know where things are and know what the score is.

Now, I'm not trying to give you a long and lugubrious story about how horrible it all is. If you really want to get down morale on how horrible it is, I invite you to read the Lloyd's insurance brochures. Now, they're in the business, they think, of selling insurance. They're probably not in that business at all, because they certainly don't follow the basic rule of insurance which is get an awful lot of ships, the more ships the better, and insure them all. And they try to get as few ships as possible by contributing to the SOLAS Convention. So they're actually going broke. Lloyd's is, by the way, going broke. And the reason they are going broke is because they're trying to cut their losses by making people handle ships safely, instead of just handle a lot of ships.

If you have a lot of ships you've already figured out what your losses are going to be anyhow and if they get lost, well, you pay up. That's the way an insurance company ought to operate. You don't go around and have all the governments pass regulations so you don't have any losses in your insurance and can put it in your pocket. That's not the way it's done. Yet that's the way they're trying to do it.

But you read their fire brochures and that sort of thing and you can get more discouraged than anything you ever saw. Because in the first place they really—and these things don't give you any information, really, about handling fires. They just tell you how everybody burns up, hah! It all burns up, ha-ha-ha! And the proper way to keep it from burning up is get insured by Lloyd's.

I can just see a captain rushing out into the wing of the bridge and shaking in the direction of the engine room or the forecabin or wherever the fire is burning, a Lloyd's insurance policy. But I suppose it's owners who buy insurance and owners don't go to sea so they don't bother to tell anybody how to put fires out.

Now, there are two types of crews. There are two types of crews—getting on with drills—two types. One is a specialized trained crew and the other is a generally trained crew. You have a specialist trained crew before you have a general trained crew. Therefore, you can very rapidly make a ship safe with specialist trained crews. In other words, each person is trained to do

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his exact duty or his exact part of the drill. And each person being trained to do that one little piece, that can be trained in no time at all—providing they are actually billed and drilled.

By “billed,” I mean you put up the guy’s name and his duties and what the drill is. And then, drilling it, you go out and get him to do it.

So, your bill-and-drill action comes off on a specialized basis. Some guy, he just gets to be an absolute whiz at connecting fire hoses. He gets so he knows where all the fire hoses are on the ship. But the guy right alongside of him who is supposed to sound the alarm—he doesn’t even know where the fire hoses are but he sure knows where the alarms are, have you got it? This is specialist training.

And one tends, after he has a ship specialist trained, to skip it, because it looks good. But then the Recognitions Chief and the Third Mate get busy and they start transferring people. And then Operations, and so forth, sends off four or five people to an AO, see in our case. The next thing you know, you haven’t got any bill. And you haven’t got any drill. The new people have all got to be trained on their new posts.

And just because somebody’s been transferred from this post to that post and somebody else from this post to that post and somebody else from this post to that post, you still think you have it drilled. No, they’re specialist trained, their duties have been changed. If you don’t drill it you will get into trouble.

You see why? Now, the thing wrong with an engine room fire or somebody there and putting it out—he did fine, he fought it out with his coat or his fire extinguisher or something of the sort before it could get going. Yes, he’s supposed to do that. But where was the guy who turned in the alarm?

Well, now the last time I asked that question somebody said to me, “Oh, we didn’t want to alarm everybody.” I don’t care if he’s got the fire half out, man! That alarm goes on! Those loud speakers go on, fire is sounded throughout that ship! Why? Because he might miss. You understand? A trail of that fire might all of a sudden go *fttttt!* someplace else. It might be an electrical short which isn’t where it’s supposed to be, and something catches fire someplace else. Maybe this fire is getting serious. It’s also of interest to get the drill called as quickly as possible. You always put a fire out as fast as you can, but you also call the drill as quickly as possible.

So the first guy who spots the fire, of course, shouldn’t go off . . . tearing off when he’s got a chance of putting out the fire. But he ought to scream at the top of his voice until he gets somebody else. And the first thing he should tell them is “Sound the alarm!” And then alarm for fire should be known in the ship. And people report to their stations.

So it’s good news if they’re all told “Hell, the fire’s been out for the last ten minutes.” They’re nevertheless there. What if the fire wasn’t out for the last ten minutes? You’re going to leave those guys all in their cabins, in their bunks, waiting to be burned up? That’s idiocy.

No, what you want to do is get an enthusiasm for disturbing people along this line. Just get a complete enthusiasm for it and say, “Heeheehee! I dropped a match on the foredeck—fire drill! Fire!” Two-thirty A.M.

Now, somebody falls overboard. It’s a very, very funny thing that the guy who falls overboard is falling overboard to people who have no practice in salvaging people who have fallen overboard. Because it doesn’t happen very often. And yet, actually, you will see ships time and time again lose people at sea that they never should have lost. And there are certain points in an overboard drill that aren’t followed. A guy goes overboard, one of the first things somebody thinks of is maybe throw him a life ring and the first thing they do is throw it directly at him. That hits him in the head, knocks him unconscious and he now *is* gone. It’s these little points that you know.

For instance, if a man were to go overboard and the bridge was on the ball, the bridge would get the stern and screws, if you were underway, out of his road. It would throw the stern and screws on the other side. So also, you

don't just say "Man overboard!" You say "Man overboard port side!" "Man overboard starboard side!" Man overboard port side? That is immediately a hard left rudder.

Now if a Con and Wheelsman aren't educated into this, if somebody went overboard he's liable to go into the screws. It's very difficult to get anything as fast as, a guy falls overboard, you can get the screws out of the road, see?

The next thing that ought to happen is somebody ought to stop those screws, because you don't want this vessel going any vast distance from him, for one thing. Another thing is, the easiest thing you ever saw in your life is to lose sight of a man at sea. At night you get a searchlight on him or a floodlight on him, you get something on him—flashlights—and you keep the flashlight on him. And somebody has the job of keeping the flashlight on him. And in daylight somebody has the job of keeping on pointing at him, because if he takes his eye away and looks back, they won't find him. That's how they lose men at sea on Man Overboard.

So each of these drills have their own little peculiarities and what you're really working for is not a specialist trained crew but a generally trained crew.

Now, I'm going to read you, rat-a-tat-tat here the requirements of some of these drills. There's a lot of good stuff in these FOs. I've put down from time to time what people didn't know about drills and what they didn't know about ships and things and tried to give them some information because there's very little information actually available on this.

This is 23rd August, Flag Order number 41, "The Four Unprofitable Courses." Happens to contain in it towards the end, with other information—it contains in it emergency drills. The first thing it says is "Any drill is better than no drill. A good drill well practiced is best to meet an emergency."

But look, *any* drill is better than no drill, see? What's really fatal is not to predict the disaster at all. Any drill, even if badly done, badly planned—that's still much better than no drill at all.

Now, your next point up the line is that a good drill well practiced is best to meet an emergency, and not only that, it'll handle your disasters. You don't have disasters on a well-drilled ship—nah! They don't happen. The crew is sufficiently alert to this, that and the other thing and they fire it off and they start doing it right and somehow or another it comes out okay.

Now, these are the important actions in sequence of importance of the leading emergency drills. They're readapted from naval and merchant drills according to experience—my own experience with these things. Now, one of the reasons you don't have, even emergencies—there's a point before this. If you're totally predicting, your crew is totally aware of what's going on and they keep the outnesses corrected you don't even ever really get up to a point where you need the drill. They already handled it. Somebody walking by an engine saw an open oil can there that is liable to tip over in such a way as to start a fire, you know, and he moved it. On another ship they would have left it there, in a seaway it would have tipped over, it would have gotten into the electrical contacts and ignited maybe.

So, when an emergency occurs—this is another point you have to remember, that your drills are very often done when everything is calm and quiet and there's good daylight and the ship is all level, and the emergencies normally occur when you're rolling twenty degrees at least, pitching twenty more, everything is blowing wrong side out and you've already got your hands full and that was why you had the emergency in the first place. Things are being shaken up, people's attention is distracted. So your actual performance of the drill is normally carried out under very rough conditions.

Now, the way you substitute for this is you get the guys on the drills to know the drills so well that the additional randomness doesn't bother them. In other words, they know what they're supposed to do. And they go ahead and

Drills
Reference
FO 41

do it. And the additional motion and the chaos and the confusion and maybe a fire going on at the same time you've got a damage control drill going on, something like that. Oh well, they can take care of that. It's confidence.

You can also get a crew so confident that they aren't careful at all—of anything. One of the funniest things: There was a fire school invented, oh, sometime during World War II and the fog nozzle—which they seem now to have forgotten about—a fog nozzle was adapted to hoses and it permitted a fellow to walk through fire. All you did was hold this fire hose in front of you with what is called a fog nozzle, and the fog going out actually made a zone and area that you could walk through with flames all over the place. And they used to take a replica of a ship and they'd fill it full of oil and—it had compartments and so forth—they'd fill it full of oil and they'd set it on fire, and they'd get crews of vessels that they had there and they'd set this thing on fire and they'd give them these fog nozzles. They wouldn't give them hot papa suits or anything, you know. No asbestos suits or anything, and send them to walk through that fire and to get certain things out of those compartments and they'd give them these fog nozzles, to put the fire out.

The first time I ever sent a crew to one of these places they all came back and they were a bit singed in spots—but were they cocky. They had actually learned they could conquer fire. And after that you had to watch them all the time. They'd throw cigarettes down in oil cans.

But it's quite spectacular doing one of these things. And it's a funny thing, but they're actually not now much in use, but they send out a fog of water in front of one and as one just keeps walking, why, of course the flames don't do a thing.

Now, the first one—the first drill here is fire drill. And the alarm is a strident ringing of the ship's bell—to which you can add yelling "Fire!" and if you can get to it and it's on, PA. But the first alarm that you can get to, you get to and your first, most immediate alarm is, of course, yelling "Fire!" and you say where. Just saying "Fire!" is no good. It's a generality. It's suppressive. You could get an Ethics Order on you for being suppressive. You've got to say where this fire is, and then people are supposed to go in that direction and handle the fire.

But the traditional sound, the traditional signal that signals fire, is a strident ringing of the ship's bell. And the spotter of the fire yells alarm and tries to put the fire out. And anyone hearing, shouts the alarm. And the rest of the drill is they man the extinguishers. And you head boat to put the fire to leeward, and you rig the deck fire pumps and you form rescue teams with smoke masks and jackets. You get the bilge pumps going. You distribute life preservers, and you ready up the first-aid kit, and you ready up distress signals and turn on radio transmitter to distress and you be ready to sound damage control or abandon ship.

And regardless, if it was just a match, all those things get done, see. They all get done. If there was a fire, they all get done. It isn't somebody in the engine room all of a sudden, or back in the forecastle, sees a fire and puts it out or stands there putting it out and a couple of other guys wander up and they help him put it out and they eventually put it out so they don't bother anybody. Boy, every one of those guys, although they're doing fine putting the fire out, they're cutting your throat.

One guy's putting the fire out, he should be yelling like hell where the fire is and somebody to spread the alarm. And somebody ought to spread that alarm on the decks and get it onto the ship's bell and get it over the ship's PA system and everybody else assigned in that watch ought to go through his *entire* evolution, because they have unreasonably predicted at the scene of the fire that they will be able to stop it. And very often *that's* the fire that really gets you—when they don't but no alarm has been sounded. Do you see?

People appear to be modest and they don't like to make a fuss, and the whole civilization is getting educated that a *good* person is one who *doesn't*

make any trouble. That's for the birds. If they want the civilization to go up in smoke that's the kind of a civilization to have. Nobody ever causes any trouble.

Somebody gives you an illegal order and you don't cause any trouble about it, now you're liable to *be* in trouble. Because you've worsened the entire ship's performance—you accepted an illegal order. Right there she starts caving in.

It isn't the person who causes no trouble who is a valuable person. If you think that is the case, you could man a ship straight from the morgue.

So our actions are to drill it up—to drill it up. And that, in this old Flag Order, gives you the minimum stations. Those are the minimum stations and actions of a fire drill.

Now damage control. "The alarm is a steady blast on siren, whistle or horn. The name of the drill shouted." That's just one long, continuous blast. And you sound it on anything you can get sounded. For a long time we haven't even had a whistle, but we've got one now, by which to sound such a thing.

Now, "The spotter yells the alarm and does what he can. Anyone near the alarm sounds it. Damage control party to area with rudimentary tools, bars, blankets and so forth. Rig and start bilge pumps. Ready a deck pump. Get gear to mend damage. Stand by, distress signals and radio turned on and tuned to distress." Minimum—minimum actions.

"You ready a first-aid station and rescue party. Damage may be structural failure or accident on deck, in quarters, in hull or engine room." It's just any damage—to the hull, to a person, to anything. Damage.

Now, when you sound the alarm you say what the damage is and you go ahead and carry it out as a full drill.

"Collision is intermittent blasts on a siren." You can also make intermittent blasts on the ship's whistle. But that is collision.

"On imminence of collision, a fender party to point of possible contact with fenders and boat hooks. And if collision too much or occurring, fender party retreats." In other words, they don't stand there like the boy on the burning deck and get eaten up, because another ship coming into you can penetrate many feet. So they try to fend off what they can, and if it can't, why, they retreat.

"Collision mats or mattresses, to plug any holes, to scene. You hold ship in contact, if possible." You run into somebody you do not instantly reverse your engines. You can slow them, but you just keep that hole plugged. Because when you take your bow out, he'll sink.

"You turn on the bilge pumps, ready and man deck pumps to pump ship or fight fire or cool steel." In all collisions, and so on, steel goes red hot, sparks fly up fifteen, twenty feet in the air. I've seen iron plates of ships actually melt and curl under the heat of impact of a collision. And "You stand by distress flares and turn on and tune in radio on distress frequency and you man the first-aid station rescue team and you note the number and name of the other vessel. You be ready to sound Man Overboard or Damage Control or Abandon Ship." And those are again, minimal. Those are the minimal actions which have to be done.

"Man Overboard is shouting and long blast on whistle or horn." Of course, you can repeat this long blast. "The spotter throws a life ring toward but not at the man in the water. If spotter is steersman, signal engines to stop or if bridge control, throw engines out of gear and throw life ring in that order." In other words, the first action, actually, is to get the stern out of the road, get the engines stopped and get a life ring over. But the trouble is these things very often happen, there's only one guy around. So he's somehow or another got to impart this information. He's got to get the man overboard but he's also got to get the drill going. He does everything he can do, but he gets the drill going.

And the one fatal thing he can do is to take his pointing finger off, as we

will get to here in a moment. "You sound the alarm on whistle or horn. You turn on searchlights if at night. The spotter continues to point to man, do not take eyes off of him. If spotter is steersman, don't return to the wheel. Send man aft to keep the man in sight and get the captain at con and prepare to lower boat or raft. Prepare throwing lines. Turn ship to reverse reciprocal course exactly at reduced speed." That is, you go on a sort of a oval course. But "Shut off the engines"—or, if you're sailing, reduce sails—"before coming close to man so as not to catch him in the screw or strike him."

There was a big rescue pulled off, off of a coast of England. And three people were being picked up out of the water, they'd gone into the water from a small yacht or something like that and the guy picking them up killed all of them with his screws. It was very unseamanlike.

And then you "Rescue the fellow as seems best." Now, one of the things you don't do is send another guy over the side. In other words, the thing to do is not to just shuck off your shoes and jump in the water to get this other guy, because now you've got *two guys* in the water. You've now got two guys in the water. It might seem like a good idea later on, and that's why we say "rescue as seems best," but by that time you would be lying in the water dead alongside of the guy one way or the other and you couldn't get him over, and somebody dives in with a line on him and takes him over and gets the guy pulled back. Something like this can happen. But just seeing a man go overboard and then diving right in after him—you've now got two men overboard. That's not smart. You could then have another man see these two men and he dives overboard, and the next thing you know the whole crew is in the water.

Now, the next drill is Abandon Ship. And it's always by orders only. Nobody ever sounds any alarm or anything to abandon ship. And it's by orders. And that would normally be from the captain or in his absence or disability, the con. And you "Send up distress rockets and give the Mayday on the radio. You distribute life preservers. You prepare and launch all boats but do not let them be entered by crew and keep them on leeward side on lines. Secure ship's papers, money, valuables and pets. Get crew to grab protective clothing as time allows. Get majority crew into boats and all but Bosun, Radioman and Captain well away with one boat held for them. Get additional food, water into last boat as time allows. Throw life rings and debris and orange stain into the water as time allows. Throw out buoy to mark wreck if in shoals. Bosun, radioman and captain into boat, pull off beyond the possible limits of sinking whirlpool." Because when a ship goes down it makes a tremendous whirlpool and pulls anybody swimming around in the water right along with it.

"Pull off beyond the possible limits of a sinking whirlpool or go away from the dangerous part of the reef. Stand by ship and stay together as ship may not go down and boats must not separate. One of the worst, wildest things that have happened—repeatedly, repeatedly happened—is the crew abandons the ship, the ship is later found still afloat and the crew is never heard of again. It's happened time after time. The crew rows away—gotten in the boats and rows away—and days, weeks, months later there's the ship. She's floating, she hasn't got anybody aboard her at all, all her boats are gone, the crew is gone, nobody ever hears from them again.

It's an amazing thing how often the sinking ship doesn't sink, or how often the water suddenly reaches the fire and it goes out, do you see?

"You send up occasional distress flare as supply allows and assist rescuers by staying near debris and making lights. And you re-enter the ship if it doesn't sink or break up. And a severe accident drill, where someone is badly injured, is done by the Damage Control bill."

Now there, just to read that off at you one way or the other, but to give you its meaning and its purpose. And the meaning . . . basic meaning and

purpose of all of these drills is familiarity with the routine things that can happen.

And if a crew—if that scares you to death, what unscares you is to know that you're in a well-drilled crew. Don't just leave me being scared to death. It's better to acquaint you with the facts of life than just one or two of your officers wandering around, worrying about things.

Now, when the life of a ship is a good life is when people are doing their jobs. And when it is a safe life is when it is well billed and drilled. And there's really nothing much to this.

Now, running off a drill is not done on a walk-about fashion. What you do normally, the exact procedure of getting a drill in, is first bill it. And make sure that all these points—Flag Order 41—are certainly covered. You bill it, you assign the people, and then you take that bill and put it in someplace in the vicinity of where you're holding your drills. And you let people look up what their post is and then let them walk to their post and locate where they're going to be or what what is, and familiarize themselves with it, and walk back. Now they know where they're supposed to be and what they're supposed to do. Good? That's the last walking that is ever done in a drill. All drills are accomplished at a dead run with the maximum number of noise and thunder. And they're done in minimum speed. And if a ship is very, very well drilled, it has the whole drill done in under a minute. Bang! Done. It's all there. It's quite magical.

Now, you can extend drilling out to a considerable distance. Drilling, of course, to an army means squads right, squads left and that sort of thing. It doesn't mean that to a ship. It's not an orderly proceeding at all. It looks very disorderly and that is one of the things that a sailor has over people on the land. He's supposed to be good in an awful lot of things, and he's supposed to be able to handle a lot of things, and he's supposed to be able to operate in a total confusion. When everything is going to hell, he should be able to operate.

And that is why the Sea Org probably is successful on running missions, because it seldom goes into areas that aren't in a confusion.

So the net result of it is that a ship is drilled to a point where its crew is not only specialized but generally familiar with the entirety of the drill and can do it in a minimum amount of time so that when the ship is faced with a disaster it copes with the disaster and it only becomes an emergency.

And then the next thing you have to know about all of this is the confidence of the vessel will be in proportion to its ability at drills. A vessel which is not well drilled, a vessel which isn't fast on its drills, you will find the crew doesn't have very much confidence in.

Now, in a large ship such as this, the crew has some tendency to "hotelize." The rooms, they look like building-type rooms. You could get the illusion that you were ashore. And that is the only liability this big ship has. You can get the illusion that you're ashore. You're not. You're at sea.

People have a tendency to sort of fall out of communication with one another. People who live back aft seldom meet anybody up forward. Days can go on, you don't know somebody is even aboard.

Therefore a medium-sized ship is very easy to get drilled up, but a large ship isn't because it all looks so solid. It doesn't look bouncy about, it doesn't look like you'll ever have to do anything about it.

Let me tell you this: The larger the ship is, the more urgent it is that you have perfect drills, because of this very factor—this very factor. It looks all so stable. When you get a ship this size blowing down on a coast without its engines, wow, wow, wow! How are you going to handle this? Do you see? It's a big ship, but it becomes a very big catastrophe unless it's only handled as an emergency.

Now, I hope, in giving you these talks, why, I am not stirring up your fears and tremors, but you must realize that some crews when they just come

aboard a ship get trained up to the point where they know who the Captain is, and they then think they're doing pretty well: They know who the Captain is. Then when they get further educated they know maybe who the Chief Officer is. Then they gradually find out who the Purser is. But the truth of the matter is some crews, unless they're trained and drilled and so on, never do find out that they're at sea.

And Old Man Sea is the most amenable old fellow you ever met in your life. He hasn't got a kind bone in his body, but he does respect a ship which is well drilled. But that doesn't say he doesn't just hang around a ship every once in a while and look around and "I wonder where those guys are weak, huh? Shall we test them out?"

And the trick is not to be weak anywhere.

There's a lot of fun going to sea, there's a lot of fun that has to do with sailing around and . . . The scenery at sea, somebody might think it's monotonous, but I've never really seen two days at sea that were alike. The scenery is very changeable, conditions change, things happen and so on.

And if you want a nice, calm time at sea, why, you have a very well drilled ship. I don't know how well drilled we are right at the present moment, but at any time I could say that we could be better drilled than we are. Anybody could say that at any time and it would be true. You can always be better drilled. You've always got a recruit who hasn't been through the drills yet.

But one thing I must warn you against is letting drills become boring, walk-through, take old-timers and make them go through slow, explanatory drills, and you'll eventually wind up killing the whole subject of drilling. Guys who know their drills—you don't put them through a drill instruction period of telling them what the drills are all about. You get your new people and you take those people and you drill them for a little while on their posts and what it is all about completely separate from the rest of the ship because they won't get in the road. And then your drill period simply calls for calling off your various drills. You give some semblance of the signal and you call the drill off—bango!

Now, if you're ever going to drill around in a harbor, you put up international code for "We are conducting drills." And you go right ahead and conduct them all the way through. The idea of conducting drills without any signals, without any officers ever blowing their whistles or—all of this is balderdash.

Somebody is assigned to the radio, so you say, "You're assigned to the radio." "Yeah, all right." "Good. Well, that's a drill." No, a drill must be made as actual as possible. You light a fire someplace for your fire drills. And even if somebody puts the fire out, you go through the whole cycle of the drill. Everybody gets everything he's supposed to have.

The drill is over when the officer in charge of the drill says it is over, not when the fire is out.

Now, the net gain of all of this is a well trained, smart ship. On this particular vessel we have not done anywhere near the drilling that we should do, and one of the reasons for that is, is drilling occasionally has been made so boring that people would rather be doing something else. This walk through the drill—because you have two new recruits, you spend the whole drill period explaining to them that this is the winch. But everybody else there knows it's the winch. What the hell are you doing explaining the winch to all these other guys that know it's a winch. Why don't you have a special drill period for the new people, show them all these things, show them what they're supposed to do and so forth. And then the drill period is short and brief. And if you have a drill every day, why, you're running at about minimum drilling.

To have the drill scheduled at a particular time during the day can be a mistake, because emergencies don't schedule themselves.

But nevertheless, if you have just a brief period in which you give a drill and the drill is there and the people come up and they run like hell and they get their equipment and they've got it all straightened out and the whole drill comes off in a total evolution, somebody's standing there from the moment the drill is called with a stopwatch. The whole evolution comes off, finishes up, he stops the stopwatch; not when the fire's out, when everybody has reported and up. You'll find out that everybody has reported and the whole thing gone through and so forth will at first occupy up to twenty-five minutes, half an hour, chasing people up, trying to find out this. But you chase them up and you don't stop that stopwatch—everybody hasn't done it. Everybody hasn't manned his station, so on. So you have to dig them up.

Gradually, you do that with that drill and you do it with the next drill and you do it with the next drill, the next drill and gradually you'll start getting this time down. It comes down to fifteen minutes, it comes down to ten minutes, down to five minutes, down to four minutes, three minutes—it comes down to thirty-six seconds. Now you're there. That's good, see?

Strident ringing of the ship's bell—"Fire on the poopdeck!"—stop. "Good. Thirty-six seconds. They're getting pretty good now." You get the idea?

Drills are done against time. It is not how bored you can make people, it's how confident you can make them.

All due respect to it, when you're out there do you know that you have about two miles of water under you in very many parts of the ocean? Two miles of water. And you know you can't walk down to it. They're the safe places to be, though. A lot of places where we anchor, why, there is only a third of the length of the ship worth of water under us. It isn't how much water that's under you, it's who you've got aboard and what they can do.

Thank you very much.