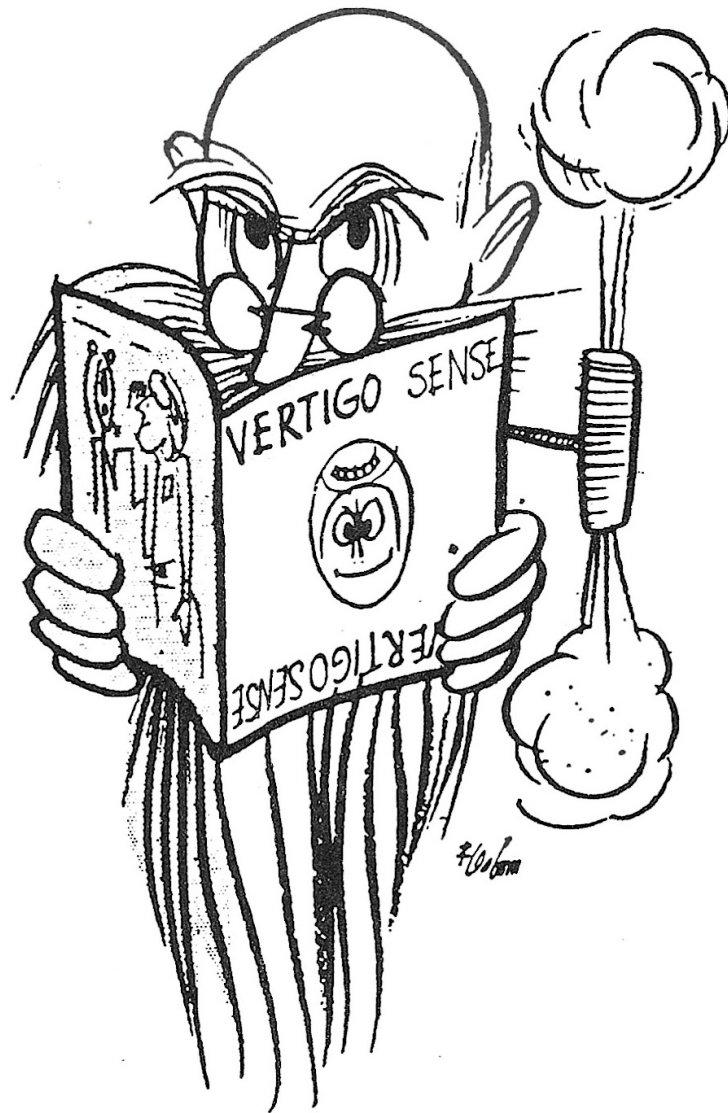


Jumpin' Jehoshaphat!

ROBERT OSBORN, ACE CARTOONIST

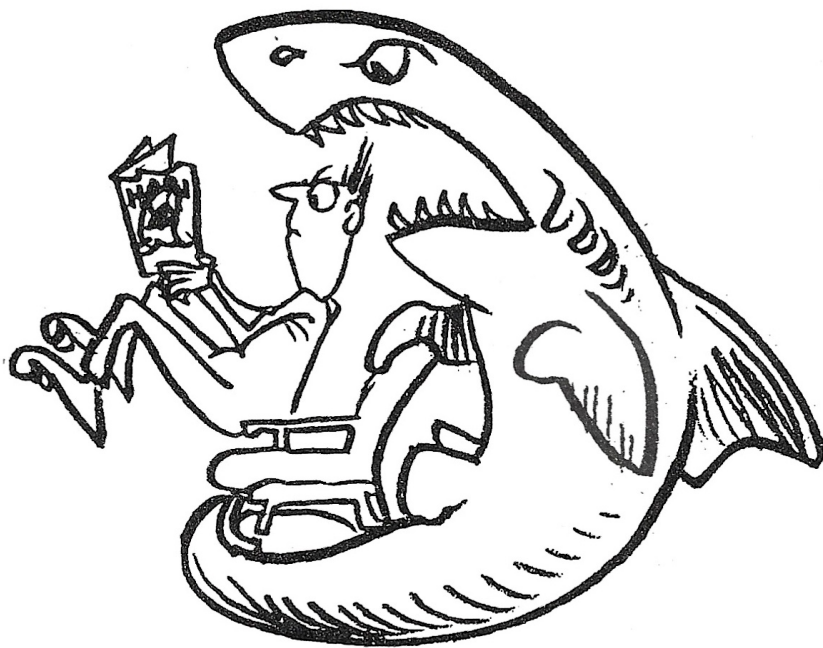
Excerpts from the **Sense Books**
compiled by the Navy Museum to accompany the exhibition



Robert Osborn's first Navy assignment was with the Training Literature Unit which produced the **Sense Books**. This series of lively pamphlets with text and cartoons covered all manner of flying hazards. During this time Osborn calculated he drew over 30,000 sketches, studies and printable drawings.

from SHARK SENSE

A shark, like Satan, is a completely unloved and disreputable thing. Nobody ever undertook, out of interest in fair play for a shark or a devil, to refute any story about either of them. The result was that the lore and legend, born in the imaginations of lonely sailors, became accepted facts about sharks. Some of these tales, doubtless, had a grain of truth in them, but in repeated tellings they improved so that by the beginning of the nineteenth century, shark tales took place alongside stories of pirates and buried treasure in the imagination of the willingly credulous people.



The truth about sharks biting people seems to be this:

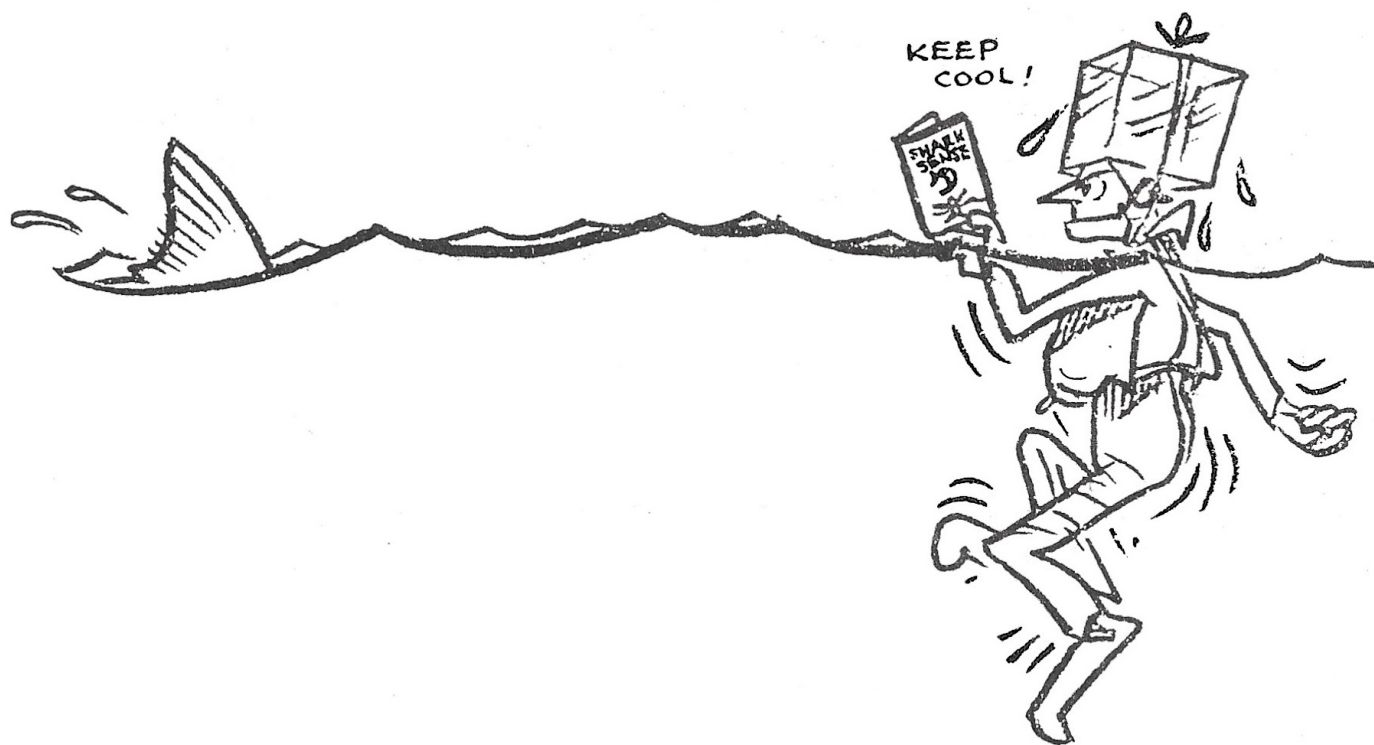
Like most other fish, the shark is a carnivorous, or meat-eating, animal. Ordinarily, he feeds on other fishes. Being a scavenger, he prefers them dead, and if not dead, badly wounded. If alive and healthy and not overly-courageous, he likes them small enough not to be able to put up much of a fight. But many a big fish, caught helplessly on a hook and being reeled in, has been attacked and partly eaten by a shark much smaller than the fish itself.

A giant ray can live for years without being molested by a shark. Drag the ray aboard ship, chop off his barbed tail and heave him back into the water. In no time, the sharks will have him devoured.

According to the preponderance of accumulated data and actual experience with sharks, a man forced down in tropical waters is justified in feeling reasonably safe from shark attacks. You may expect something like the following to happen:

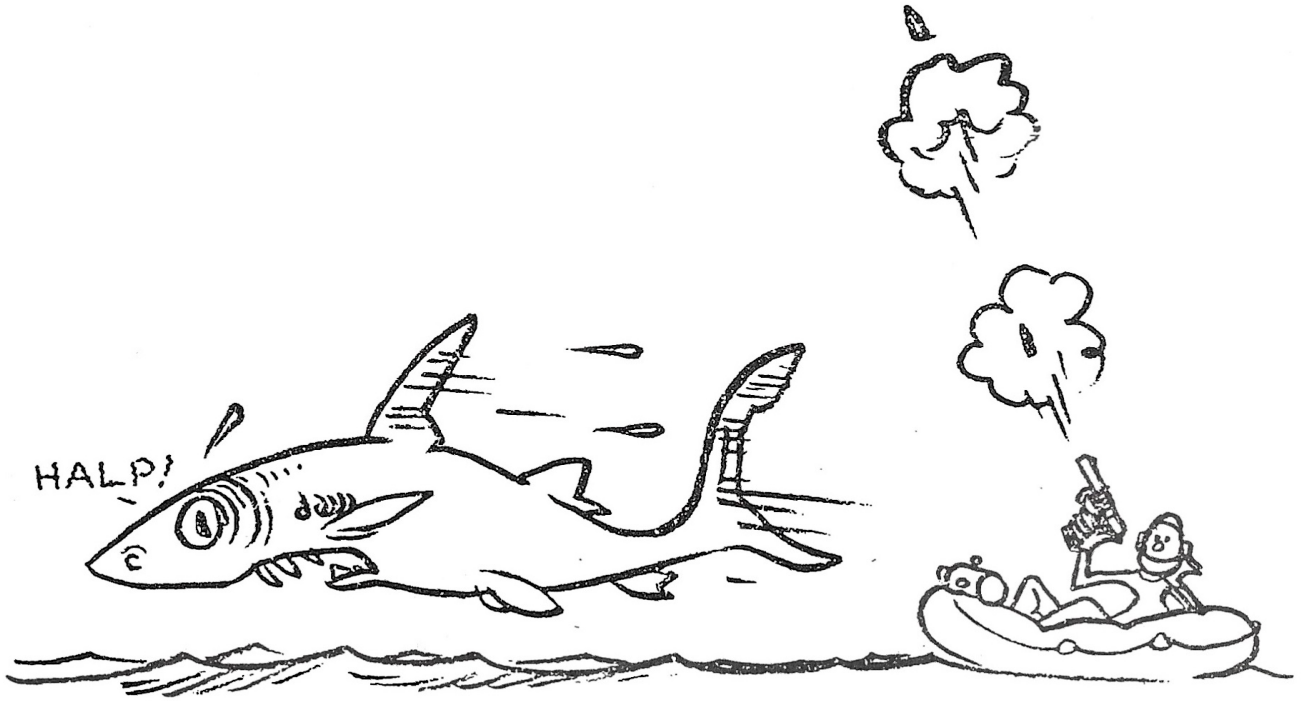
The commotion caused by dropping in the water and freeing your parachute, very likely, will scare all fish away for the time being. Presently—perhaps within a half hour or so—a shark may show himself. He probably will circle you a few times, at a distance of 50 yards or more. He will be close to the surface, and doubtless his dorsal fin will break water. And he won't be a pretty thing to look at.

Then he will approach closer. He may come up and stare at you from a distance of a few feet. The experts say you are to take no action; merely remain calm, and continue riding in your life jacket or rubber boat as though no shark were near



you. Keep moving, however. Don't let the shark mistake you for a corpse. Presently, they say, he will go on away.

If you have your pistol and can do so, a shot may be fired—but *not into the shark*. The noise of the explosion will frighten the shark away. If you shoot the shark,



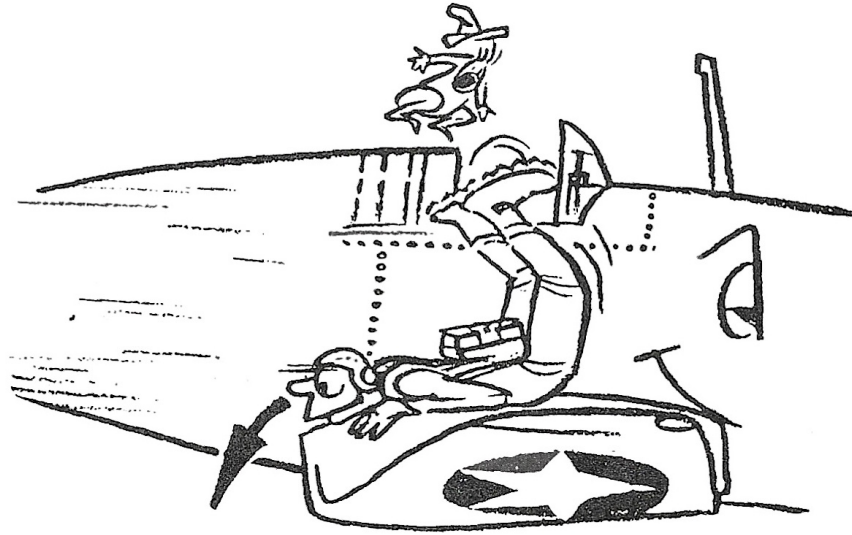
even though you may kill him, there will be blood in the water, and blood always attracts all the sharks in the vicinity.

If it appears there is likely to be some tough opposition, he withdraws to a previously prepared position and finds business on another front.

His choice of food follows the pattern of the struggle for life among practically all the wild animals, whether ashore or afloat. The weaker ones constantly fall prey to the bigger ones. Remember the old nursery rhyme:

Little fish have larger fish
Swimming 'round to bite 'em.
And these have still larger fish—
And so, *ad infinitum*.

from PARACHUTE SENSE



YOU'RE ON YOUR WAY

to being an accomplished flyer. More than that—an accomplished *combat* flyer. You know what that entails—airmanship, seamanship, gunnery, navigation, radio, and more than a casual knowledge of your power plant.

It also entails something else—the responsibility on your part to remain alive to use the education given you in these branches of war aviation. You represent a lot of investment—you're a valuable property. So be a good fellow and don't knock yourself off.

THE NAVY DECIDED

to shoot another hundred and twenty-five dollars and provide you with a parachute. During your career as a Naval Aviator you will spend a great deal of time sitting on, among other things, your parachute. Do not allow the monotony of this to lull you into the false impression that a parachute is a cushion. If that were the purpose of it, the Navy could have provided you with a simple Kapok pillow that would have been less expensive and more comfortable. A parachute is much more than a cushion. It is a handy device for saving your life.

A parachute consists of a large nylon umbrella, or bumbershoot, together with certain straps and buckles for attaching it to your person. The umbrella part will take care of its end with no help from you; the straps and buckles must be adjusted.

Properly adjusted! Otherwise you may undergo the embarrassing experience of having a parachute bring you down quite safely, but in several pieces. This is due to the fact that when a parachute opens, it kicks like an Army mule. The opening of a carelessly adjusted parachute will often knock a man out. Correctly adjusted, the same parachute will waft you to earth safely, gently, and intact.

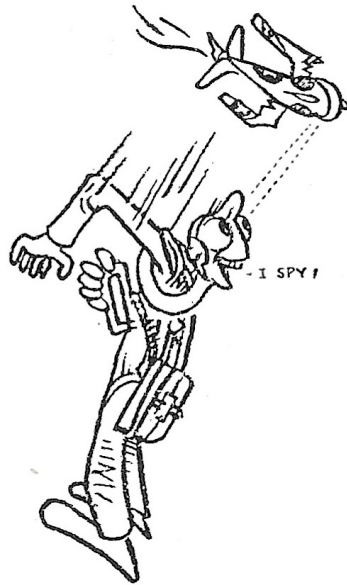
PROCEDURE DURING DESCENT

THE \$64 QUESTION IS TOO EASY—BUT IS IT?

This question is: What is the first movement you make after you go over the side of your aircraft in an emergency exit? You would answer—and loudly—PULL THAT—RIP CORD!

And you would be wrong—and no money for you!

The first thing you do is make *absolutely sure* you're clear of your aircraft. And although this may come as a shock, the best way to insure that (in addition to leaving your plane correctly) is to LOOK FOR THE PLANE. This is done by the conventional movement of turning the head and opening the eyes, if you have



closed them—or just turning the head if your eyes are already open—which they should be. If you keep your goggles on you will experience no difficulty. You can raise them during descent to give yourself an unobstructed horizon and select your most suitable landing place.

If you go out of your aircraft backwards, or dive with your knees drawn up, you will somersault. THIS IS TO BE AVOIDED, SO KEEP YOUR LEGS STRAIGHT IF YOU CAN, OR STRAIGHTEN THEM AS SOON AS YOU'RE CLEAR, AND *BEFORE* YOU PULL THE RIP CORD.



Somersaulting may be great fun, and may make you feel young again, but it also means that when you pull the rip cord the lift webs will undoubtedly come up between your knees, and you'll make your descent upside down and with a certain amount of pain. A British pamphlet says, "a very good view of the ground is at once obtained but the position is extremely uncomfortable, definitely undignified, and you may even lose things out of your pockets."

If one of those things in your pockets happens to be your address book, you'll bewilder the farmer who picks it up and also leave yourself with nothing to do at night but go to the movies. That's hard on your eyes.

So get your legs out straight *before* you pull the rip cord, and come on down right—this is no time for experimenting.

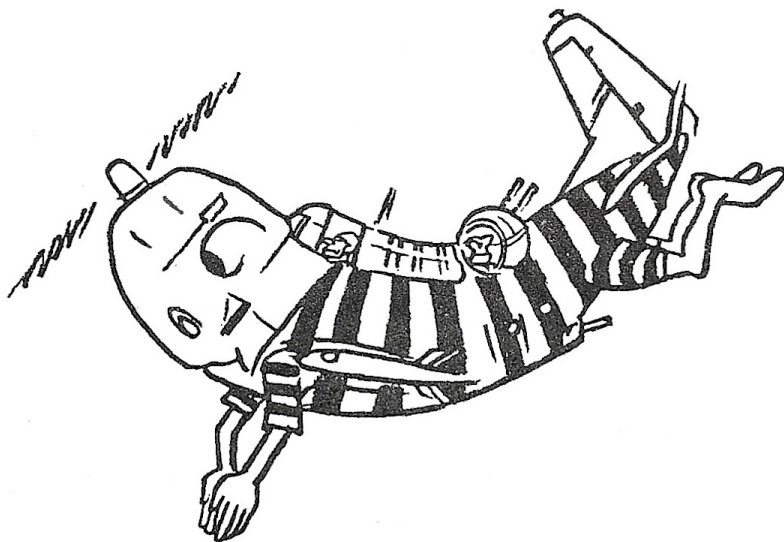
LIKE LYING ON A FEATHER BED

is the way experienced jumpers describe the sensation of falling before the rip cord is pulled. Contrary to most belief, there is no actual sensation of "falling" at all. The reason for that is that your body builds up a cushion of air underneath it. Movement of your limbs is unimpaired—and straightening your legs will keep you from any somersaulting or spinning that would add to your difficulty in functioning normally.



from DUNKING SENSE

Not every flyer goes rafting—most won't—but there will be enough pilots and air crews dunked into the briny deep to make it a sound idea to get the dope now—while you're dry.



Naturally most of us prefer to do our cruising at sea in an air-borne plane, rather than in a surface raft. Unfortunately, however, there is a bottom to all gas tanks and even occasionally a Nip may give you the wet seat. Or perhaps you're just plain lost.

That is just the time to steady down and take it easy. While you're still in the air check your navigation once more. Did you make an error? Is it too late to fly back to the location you should have been heading for all the time? It would be a big help to your base to receive your corrected position—they might even get a bearing from the transmission. All of this, of course, depends upon the tactical situation prevailing at the time.

If, however, it is obvious that shortly you are going to sit down in the drink, knock off worrying about it. Just because an impending father thinks his baby is to be the first one born is no proof that this is true. Plenty of pilots long before your time have landed in the water with little consequent trouble. Dozens of plane crews have been in a similar predicament with no unfavorable results.

So knock off stewing about it. If you've taken proper precautions to train each member of the plane crew, everything is in your favor.

Crash landing procedure has been carefully worked out and much time and thought have been spent in perfecting equipment to keep you afloat with reasonable comfort until you are picked up. It's not the Ritz, of course, but let's be grateful for small things! Your raft is a vessel which you can sail to safety. Every century has its tales of shipwrecks and small boat voyages. One great lesson stands out: *If you are determined to get ashore and go about it coolly and patiently, almost invariably you will survive no matter how great the difficulties.*

ON A RAFT?

Well, why not? You're there anyway, whether it's a one-man job or one of the big ones that carry seven. Wherever you are, it keeps you afloat, for rafts are probably the most seaworthy craft ever invented. However, certain things must be kept in mind:



1. Avoid wreckage or anything that might put a hole in the fabric.
2. Avoid handling knives or sharp tools near the fabric for the same reason and be careful of metal buttons, the sides of shoes, etc., which might wear it thin.
3. Inspect carefully and periodically for air leaks. If you find one, plug it immediately with one of the wood or moulded rubber plugs, or one of the new clamp type plugs if your raft is equipped with them. Then get out the patching kit, scrape the rubber around the leak with the roughing tool, make sure the scraped spot is dry, cut patch to size (large enough to cover hole and scraped area), apply cement, and then put on the patch, pressing down firmly until it takes hold.

DON'T DRINK SEA WATER.

This is no time to become an old salt. Some raftsmen have survived after imbibing straight sea water—but evidence indicates they came through *despite* this dangerous grog. Recent experiments by American and English scientists fully confirm the old mariners' belief that this is a perilous practice, causing intestinal upsets and taking more moisture out of the body than it brings in.

DON'T COME IN WHEN IT RAINS.

Dehydration, or the drying up of body moisture, is the chief difficulty facing the shipwrecked on a long cruise. Your system has to have a certain amount of water to keep going; if the intake isn't enough to balance outgo, the difference comes out of body tissues. While the kidneys continue to function to carry off wastes, bowel movements are generally few, even one a month being considered normal under these circumstances.

You can do many things on a raft to keep from becoming like an old cavalry boot in appearance and composition. Most important, see that your raft and emergency pack has its allotted number of cans of drinking water, paulin or sailcloth for collecting rain water, and

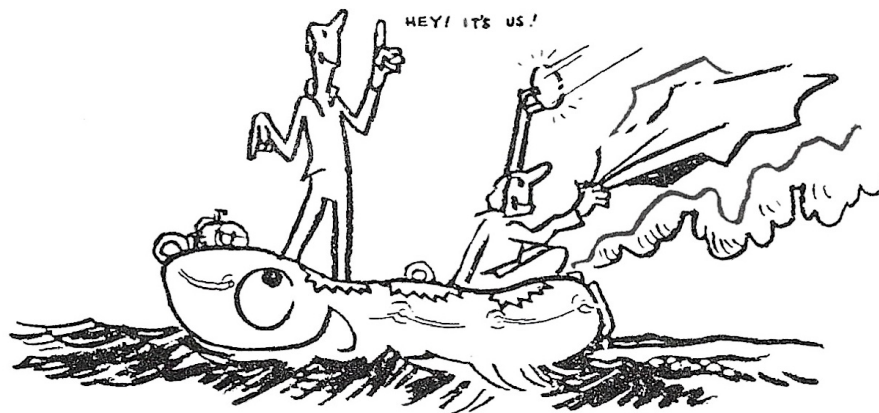


kits for de-salting sea water. The Navy is now equipping its life rafts with these kits, marvelous little gadgets that can turn the briniest sea water into something better—in this case—than the finest vintage champagne.

SPORTSMAN'S DEPARTMENT

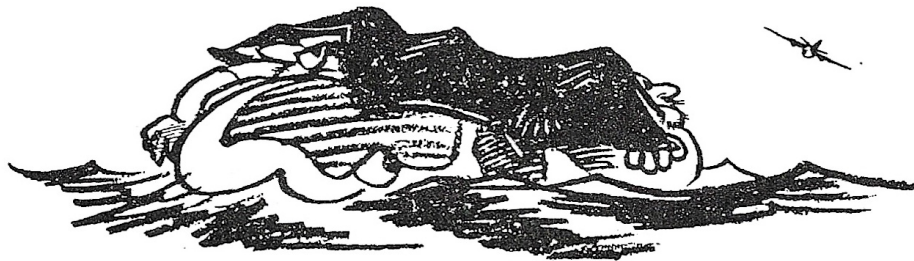
Among the many jolly playthings on your life raft you'll find a carefully planned fishing kit. This should be good news to all pilots afflicted with the annoying habit of eating.

THE CHAMELEON TURN.



Rafts are provided with several means of signaling rescue craft, including a reflector, smoke grenades, and fluorescein dye. This latter makes a conspicuous stain on the water, as has already been said, but the stain will last only a few hours and must therefore be used with discretion. As a matter of fact, nothing calls for better judgment than when and where to use signals. If you use up your equipment on the off-chance of somebody seeing you, perhaps you are forfeiting a real chance of rescue a few hours later. *Be sure, too, that you are signaling a friend and not an enemy.*

If an enemy plane appears, the time has come for you to do a chameleon turn, and hope he doesn't sight you. That sailcloth we have referred to so frequently, is orange-yellow on



one side and dark blue on the other. Change colors quick. Yank the sail down and spread it over you, sea-blue side up. If it doesn't cover the whole raft, hang clothes over the exposed parts or cover them with your bodies so the orange-yellow won't show up. If he strafes you, go over the side and remember that the raft will still float with one compartment holed. But be certain everyone hangs on to the raft to be sure it doesn't drift out of reach.

REAL SEAGOING.

That's the way you've got to be on a raft and in the plane before it lands at sea. Only by real sea discipline will you come through. Discipline means ordered cooperation. Rations must be strictly meted out and consumed as issued, no "credits" being allowed for unused portions. Watches must be stood responsibly and faithfully. The Navy expects you to live up to its tradition.

from ARCTIC SENSE

IN CASE YOU CAMP OUT IN THE ARCTIC

In spite of anything glamorous you may have read by Jack London or Robert W. Service, it's no picnic to spend the night in the open during an Arctic winter. Don't do it if you can help it, and if you have to do it because of a forced landing, make it as easy on yourself as you can.

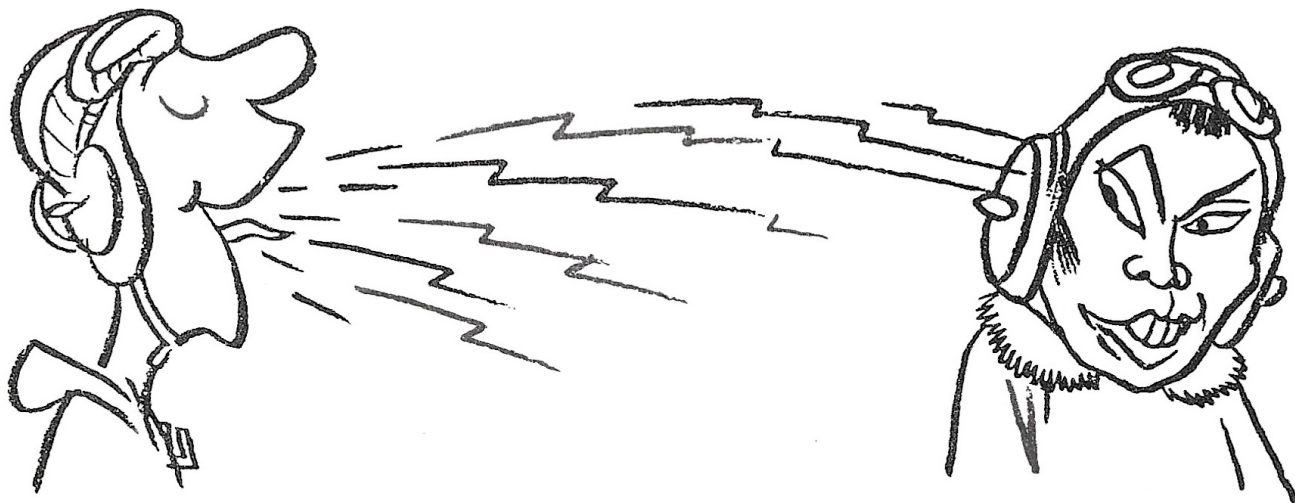
Hollow out a place in the snow for sleeping, in a location that is protected from the wind. Get as much sleep as you can with your feet toward the fire. If the cold wakes you, get up immediately and build up your fire, and warm yourself by exercising. *But don't get up a sweat.* Damp clothes will cause freezing. Take off whatever garments are necessary to prevent perspiring while exercising.

Don't attempt to travel unless you have adequate equipment and have had previous Arctic experience. *THERE ARE TWO EXCEPTIONS TO THIS RULE*—you should travel from your plane if you are positive of your position and know that shelter is within easy reach. And if searchers are not likely to reach you, you simply have to travel.

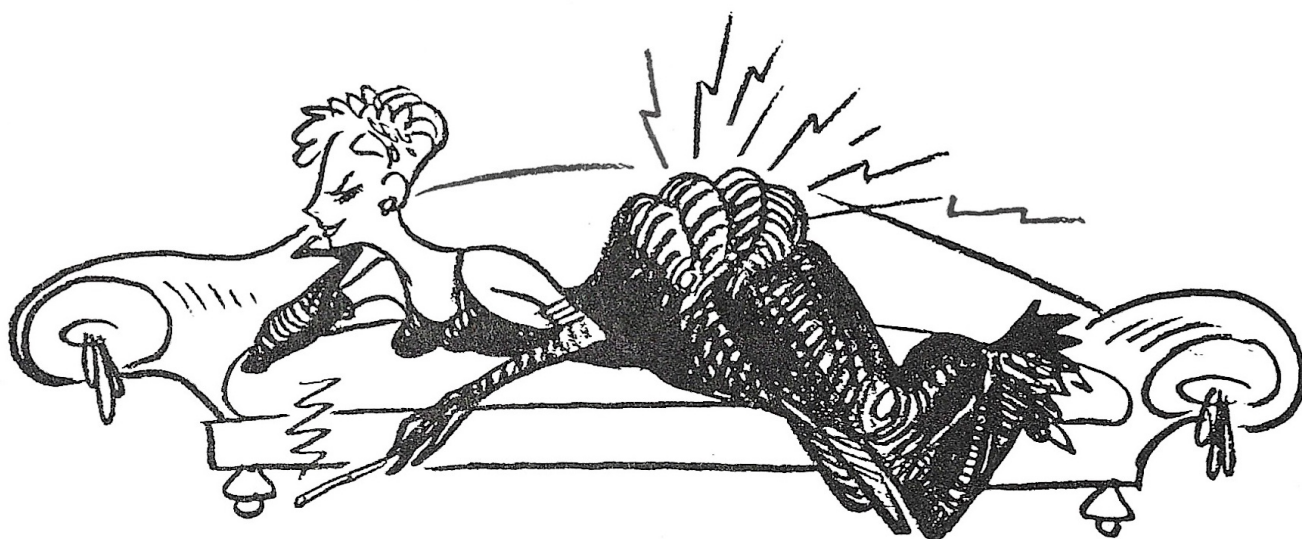


Above all, don't lose your head. You can survive many days without food if you relax and get plenty of sleep.

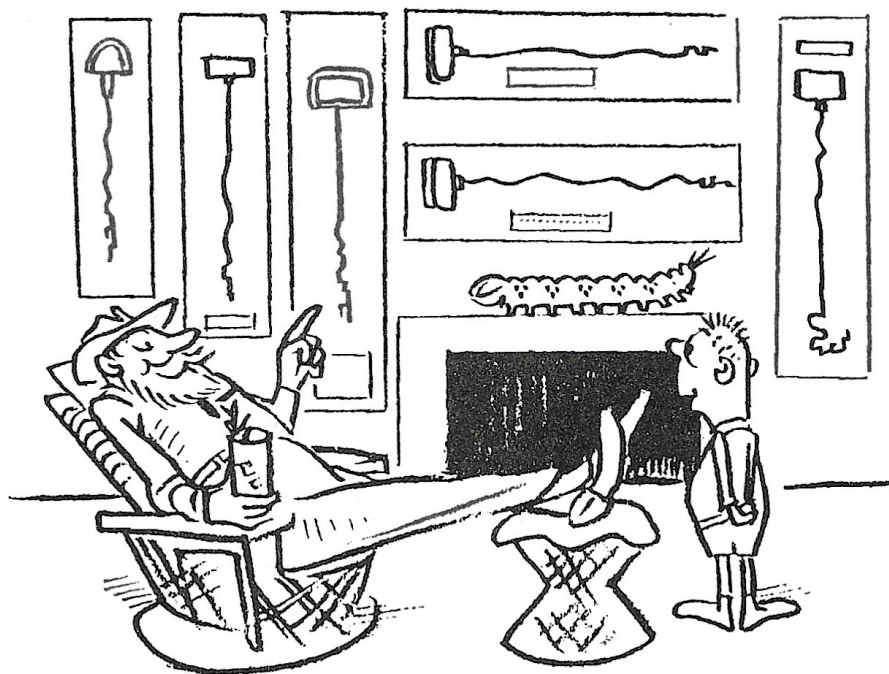
from RADIO DISCIPLINE SENSE



Your radio may have been manufactured in Oshkosh, Wisconsin, but it can be the best weapon the opposition has. So many of our own broadcasters are giving away information to the enemy, the F.B.I. should quit hunting transmitters in Mata Hari's bustle and concentrate on the TBF.



YOU HAVE BEEN GIVEN EQUIPMENT THAT WORKS.
YOU CAN TRUST IT.
YOU'VE BEEN TOLD HOW TO USE IT.
USE IT THAT WAY AND YOU HAVE AN EXCELLENT CHANCE
TO BECOME



THE *OLDEST LIVING* NAVY PILOT!