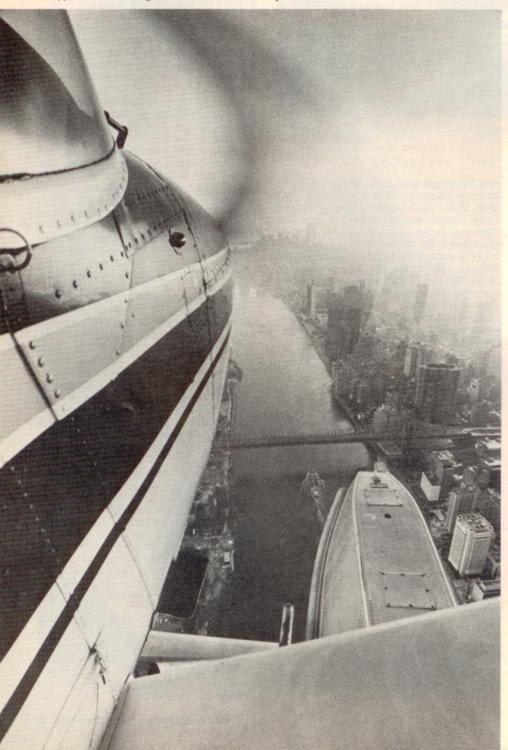
FLOATING ON AIR

FLYING PEOPLE TO NORMALLY INACCESSIBLE PLACES WHETHER YOU'RE IN ALASKA

At 1,500 feet over New York City, a Cessna seaplane heads toward an approach to a landing on the East River. Photos by the author.



Gracefully a Cessna 185 on floats sweeps under the Brooklyn Bridge. At 20 feet above the water, the plane passes a tugboat pushing a barge up New York City's East River, banks a little to the right, and splashes down.

Abruptly it stops, as a plane on wheels will stop when the brakes are hit hard but not locked. Water rudders are lowered and the aircraft bobs over the light chop created by the wakes from scores of ships in the river—wakes that reflect crazily back and forth from the jagged shoreline that man has created along the edges of this intense concentration of civilization.

An empty dock awaits the floatplane. Its pilot turns into the wind and cuts off power, and the plane glides up beside the dock. The pilot steps out on a float and moors his craft. Docked 50 yards away is the Staten Island Ferry.

The plane is at the Wall Street seaplane base, one of two commercially used bases in Manhattan. Across the road from the docks are offices—including the world's tallest building, the World Trade Center—that cast broad shadows over the harbor. Three men in suits walk down the stairs to the dock. They help unfasten ropes and board the plane. From sidewalks nearby, New Yorkers, some skeptical, some just curious, watch as the aircraft propeller spins to draw the Cessna back to the open channel.

A quick engine check, raise the water rudders, and then add full power. Drops of the East River spray the hull of the airplane, creating a sound alien to a land pilot used to associating planes with air and pavement or grass—but not water.

Now the plane picks up speed, noses down a bit as it gets on the "step" of the floats, and finally unglues itself from the water.

And the city people are on their way—home, or to a summer house out on the far end of Long Island, or to a lake upstate. They are blissfully unaware of the madness below: New York's brutal traffic tieups, its summersweltering expressways, its coin-consuming automobile toll-collectors. They are getting in and out of the city the easy way, by floatplane.

Airplanes on floats are generally thought of as bush-birds, associated

AND WATER

by BERL BRECHNER / AOPA 466558

IS A GOOD JOB FOR FLOATPLANES. OR NEW YORK CITY



Except for boats, flotsam, jetsam, swimmers and waves, touching down in a floatplane is just like landing a landplane.

with the great outdoors, with Maine or Minnesota or Alaska. These wilderness areas landscaped with lakes are virtually isolated, except for an occasional visit from a seaplane or the wanderings of a canoe.

While most of the 500 or so seaplane bases in the country are found on quiet waters near small towns, aircraft on floats are an integral part of the flying community in many metropolitan areas. But, of course, anywhere there's a stretch of moderately smooth water a seaplane base can be temporarily created, even if it's just for an afternoon picnic on an isolated island in the Great Lakes. And that's when the true versatility and the real joy of flying a floatplane becomes apparent.

Besides the Wall Street base on Manhattan, there is a dock for seaplanes on the East Side at 23rd Street. According to Jack Beehan, an official of New York City's Department of Marine and Aviation Administration, there were 2.300 seaplane operations at that base over three months last year. Thirteen charter floatplane operators have agreements with the city to use the dock.

Most of the operators are self-employed. They have one plane which they own and pilot, flying commuters in and out of the city, and moving people to and from the hundreds of water resort areas along the New York-New Jersey

Noise complaints from residents of an exclusive apartment complex near the 23rd Street base led the city and float operators to find ways to quiet their machines. DeVore Aviation, a Long Island-based aircraft engineering firm (and also the builder of Pee Kay floats), developed a three-blade-propeller conversion for airplanes commonly equipped with floats.

The city, with noise measurement studies, determined that planes equipped with the new prop were significantly quieter. Now all operators regularly using the 23rd Street base must have the three-blade prop. Also, they taxi 1,000 feet out into the river before adding takeoff power. Noise complaints

have almost totally disappeared, said Beehan.

Besides the two bases on Manhattan, there are another nine seaplane bases inside or under the boundaries of the New York Terminal Control Area.

But if you want a city with a lot of float bases, try Ketchikan, Alaska, which claims 25 such bases. According to the latest edition of AOPA's Airports U.S.A., there are a total of 202 listed floatplane bases in Alaska.

U.S. Seaplane Pilots Association President David Qualm says there are 18,000 rated float pilots in the U.S. (The FAA, when asked, said it did not keep a record of the number of water-rated pilots.) Qualm, noting a doubling of the number of floatplane fly-ins over the past two years, says interest in this facet of aviation is really growing. In fact, late this fall his association will begin publishing a magazine devoted solely to seaplane operations.

Despite the apparent freedom a set of floats can provide (freedom doubled if the floats are of an amphibious de-



Pee Kay DeVore President Gil DeVore, right, and Aerofab President Hal Linblad consider an improvement on the bottom of the Pee Kay 3500 float.

FLOATPLANES continued

sign to permit runway landings also), there are sacrifices required, too. First there is the cost. A set of floats for a light single-engine plane like a Cessna 185 may run \$10,000, not including installation. Amphibious floats may be double that price. And maintenance costs increase markedly, too.

Then there are weight and performance tradeoffs. A set of floats might weigh over 300 pounds. The full impact of that weight is diminished somewhat as a result of removal of the landing gear, but it is obvious that something

DeVore preflights the experimental installation of a set of amphibious floats on a Cessna 336 owned by his company.



has to give—either cabin loading or fuel capacity, or a combination of both.

Moreover, floats are bulky, with a length of around 20 feet and a width of three feet. Hang two of these hulks on the bottom of a single-engine plane and you're bound to diminish the aircraft's speed, climb, and maneuverability. But enough horsepower, the loss of performance is an acceptable trade for pilots looking for the added capabilities conferred on a plane with floats.

Gilbert DeVore (AOPA 9366), president of DeVore Aviation Corp., of which Pee Kay floats is a part, sees continued increases in floatplane popularity. The year has gone well for DeVore and for



Aerofab Inc., the Sanford, Me., company that manufactures the Pee Kay line for DeVore. Aerofab can barely keep up with current orders. Normally in late summer the company would be building a stockpile for the coming year.

Pee Kay Devore recently introduced a new float, the Model 2300 (the model number indicates the maximum aircraft gross weight for which a set of floats was designed). The 2300s are intended for use on the Cessna 172 and the Bellanca Scout, and will soon be certificated for installation on the Maule M-5.

Pee Kay Devore currently produces three other floats. Its Model 1800 is for lightplanes—Super Cubs and Citabrias. DeVore also makes a 3500A (amphibious) and a 3500 straight float. This size is for installation on such aircraft as the Cessna 185, 206, Piper Cherokee Six and Helio Courier. At present the company is experimenting with a set of 3900 amphibious floats installed on a Cessna 336 push-pull twin. The company has not yet made any plans to market the experimental model.

Two other companies are among the top float builders—Edo Commercial Corp., Melville, N.Y., and Wipline, Inc.,

Inver Grove Heights, Minn.

Though there are a good number of floatplanes around (no one knows exactly how many, since the floats are taken on and off from season to season), the float business is not exactly high volume. For instance, Pee Kay DeVore will have sales of about 100 sets during this year.

Floats, it seems, have a life that considerably outlasts the airplanes they are mounted on, which explains their moderate sales. Water operations are hard on airplanes. They take a beating skimming across waves, and they are weakened from corrosion—especially if the craft is operated off seawater. At Sands Point seaplane base on Long Island, commercial operators hose down their airplanes with fresh water every day after their last flight.

Floats—constructed with thousands of tightly spaced rivets, thick aluminum, lots of water-sealing compound to prevent leaks through the seams, and generous amounts of corrosion proofing—generally hold up well, given the punishment they endure.

A float is made up of several watertight compartments. Even so, most are sold with a brass bilge pump to drain out water that may accumulate in the float compartments—from top and bottom leaks, and from condensation.

When a Pee Kay float presents problems for a pilot, DeVore usually hears about it. He maintains that most float deficiencies are caused by installation problems, but he has been known to send one of his company personnel as far as Alaska to work with a pilot to untangle a suspected float foul-up. "Float guys," DeVore said, "are the

"Float guys," DeVore said, "are the most opinionated pilots in the world, and they all have different opinions. And if you try to satisfy 'em all, you'll go cray."

So he just tries to build good floats, to make sure they are delivered with all the right hardware, and to service them

properly when they need it.

The hardest thing about flying a floatplane is not the flying but the skippering. The seaplane rating can be obtained with five to ten hours of instruction. That time is devoted mostly to the techniques of moving an airplane (which makes a very unwieldy boat) around on the water. The prospective seaplane pilot learns to "sail" his ship, learns about buoys and channel markings, and learns how to paddle, moor and beach his airplane.

As far as flying a seaplane is concerned, said Walt Nolechek, a veteran float pilot operating out of Sands Point, "The only thing you can do to foul up is to fly it into the water." Glassy, calm water presents a particular hazard, since without a nearby shoreline for reference it is almost impossible to accurately judge height above the water. When such a situation occurs, the veterans recommend flying the aircraft at a steady, but slow, rate of descent right onto the water. When the floats touch, chop power and pull back on the yoke to keep the craft's nose from digging in.

One of the nicest feelings the landplane pilot experiences on his first float flight is a great sense of well-being. With pontoons on the bottom of the plane and a blanket of water spread below, engine failure no longer poses a threat—just glide down to a normal landing. According to float fliers, even an emergency touchdown on land can be comfortably executed with a seaplane. And the craft will have less tendency to nose over on a soft surface than will an aircraft on wheels.

Of course, wherever a seaplane is operated there are bound to be lovers of quiet and calm nearby—bathers, fishermen, and boaters. So best flying behavior is in order, which means maintain a good distance from boats on the water, use reduced power for climbouts to reduce noise, and avoid low overwater flights near people and boats.

Float flying is a demanding combination of two worlds, requiring new knowledge of the sea to be added to your already acquired flying skills. But once the techniques of both are mastered, you'll explore new horizons when you've got an airplane available for sail.