

AIR WEST



Norton Pearl



Story by Bob Lyhne
Photographs by Norton Pearl and Tom Bullock

takeoff by 9:53.'

'This flight is scheduled to take off at 9:43,' said the pilot. An acid touch had crept into his voice.

'We'll have you cleared for takeoff by 9:53,' the

controller responded, just as pleasantly as before. The pilot said no more. And who knows what the passengers said about how airlines keep their schedules?

Outside, out beyond the green-tinted glass that



5 o'clock in the afternoon at San Francisco International Airport



kept the cool, conditioned air inside this tower and the increasingly warmer air out, the great airliners moved deliberately, ponderously, along the taxiways, lacking the grace with which they move through their natural element. One by one, they moved to the end of the runway, just off Bayshore Freeway, and stood by for the signal to take off. Sometimes they must wait in line. But at this time, on this morning, there was no line, but they did have to take turns—whatever their schedules.

Inside the green-glassed tower, the local controller gave them clearance to take off, one by one, a procedure rather more complex than it may sound since take-offs must be interlaced with landings, and because of the sound abatement program, the landings were on Runways 28 L and R, which cross the takeoff strips 1R and L at a 90 degree angle.

This was San Francisco International Airport, the world's fourth busiest. But our focus is on the Federal Aviation Administration controllers, the men who tell the pilots where to go and what to do, the men who are responsible for maintaining a safe margin of distance between any two aircraft operating, not only landing and taking off, but, for all the airline traffic, wherever they may go on the air routes that crisscross the nation like great freeways in the sky.

The controllers have been getting a good deal of attention lately, these men who operate the nerve centers of our entire air transportation system. What has called them to public attention has been aerial traffic jams, primarily in the East. And the immediate cause at

least in part evidently was the fact that the controllers had taken to adhering quite strictly to the book.

But this was only symptomatic of the underlying causes: serious shortages, not only of controllers, but of airport facilities—runways and taxiways. Unfortunately, such shortages are not susceptible of overnight cures. It takes at least two years to train a controller. It takes a good deal more than that to plan and build an airport.

The debate over solutions to some of those problems doubtless will go on for years. Meanwhile, let's take a closer look at the aircraft controller's crucial job. He's a man who, quite as much as the pilot, has your life in his hands every time you travel by air.

The green-glassed control tower, the topmost part of the central terminal building at San Francisco International Airport, has six positions—each with a variety of radio and other equipment—facing the field.

In order, they are the flight data controller, to whom the pilot applies when he's ready to taxi out for takeoff. He obtains instructions for the flight from the Air Route Traffic Control Center, makes out a slip of paper called the flight progress strip.

This is passed along to the clearance delivery controller, who assigns a transponder code, and tells the pilot exactly how he is to take off and what route to follow. The transponder code is a setting on equipment aboard the plane that will cause it to make a distinctive blip on certain kinds of radar, a device that makes it easier for controllers to identify particular planes. The San Francisco tower will have this kind of radar within

TRAFFIC JAM



two months. Some other locations have it already.

Next there are two ground controllers, who maintain safe separation of aircraft moving about on the ground, so they won't collide with one another, or with planes that are taking off.

In the next position, the radar coordinator works with a Bay Area control center, handing off to it, one by one, control of the departing planes, and receiving the 'handoff' from it of the inbound planes.

Finally, in the sixth position, is the local controller, the man who actually tells the pilot to take off. He is responsible for coordinating the airline traffic, which is operating on instrument rules, with the general aviation traffic—private planes, corporate craft and so on—separating landings and takeoffs in the traffic pattern.

Behind these six positions is located the supervisor's position. He coordinates the operation of the entire tower, and stands ready to assist in case of special problems.

A pilot, from the time he first asks for takeoff clearance to the time he gets the go-ahead to depart, will progress through three different radio frequencies, talking to the various controllers.

This tower operation serves only to control the separation of aircraft actually using San Francisco International Airport.

Until last fall, there was a six-position radar room below the tower, in which other controllers took charge of planes in the air in the West Bay. Oakland Airport had a similar radar control for the East Bay. The two

zones of responsibility were separated by theoretically sterile air.

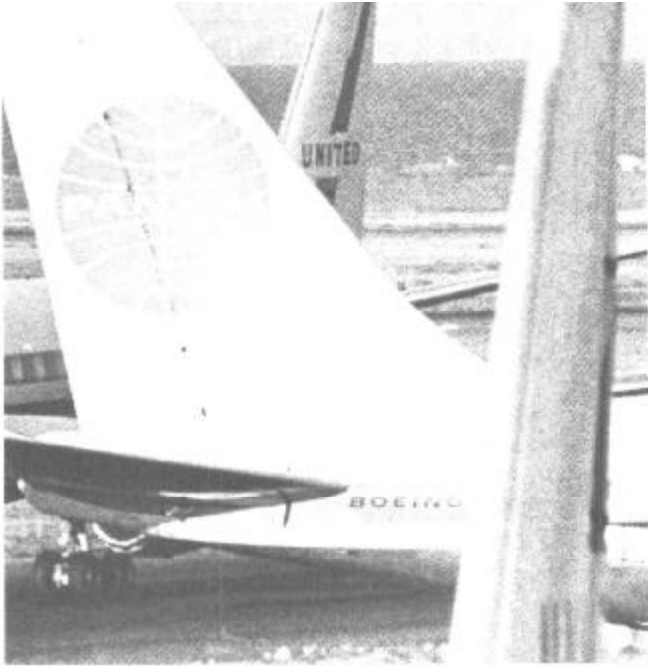
But in October, San Francisco's radar room was closed down, and the function was combined with Oakland's in a Terminal Radar Approach Control center. Last month, similar coverage for San Jose Airport and Moffett Field was brought in, so that TRACON now has unified coverage, an operation that has proved to be far more efficient than the old system.

The local tower, then, hands off a flight to Tracon, and as the flight is ready to leave the Bay area it is handed off again to Air Route Traffic Control Center in Fremont. There are twenty-seven of these centers around the country, with radar coverage of hundreds of miles. These are the centers that control planes on the aerial freeways; these are centers where controllers keep track, by radar, of each flight. Except at landing or takeoff and in bad weather, private planes generally are not under the controllers' jurisdiction.

The entire system, including some three hundred forty airport control towers, is operated by the Federal Aviation Administration. And since the aim is to keep operations as smooth as possible, as well as maintaining separation for safety, what happens in New York or Chicago very easily can affect what happens here.

'Usually, departures from here are kept three miles apart,' explains Norman E. Merkel, chief controller at the airport. 'But if aircraft start to stack up in the East, then we'll restrict takeoffs. They'll call up and say to shut it off. Instead of three mile separation, they'll ask for ten, or even twenty. Occasionally, the same sort of

Norton Mean



Tom Bullock



San Francisco tower controller follows inbound planes on final 15 miles of approach by means of televised radar screen.



Tom Bullock

thing happens with Los Angeles.

'That's when the planes start to stack up on our taxiway here. But if there are eight or ten lined up on the field, then we start holding them at the gates. Sometimes they're delayed half an hour on takeoff.'

The big problems of congestion have been in the East. Chicago is the world's busiest airport. New York ranks second, and Los Angeles, third. San Francisco ranks fourth busiest—again, in the world.

So some of the problems that have plagued the East exist here, to lesser degree. One has been a shortage of controllers.

Merkel has twenty-five controllers and three supervisors to operate the San Francisco tower, and that's far from enough. As a result, they're all pulling overtime, generally an extra day, rather than a longer day. Recently, it has averaged a sixth day every second week.

'Overtime is the only way we can keep this thing going until we get some new people trained,' Merkel said.

What happened? Why is there such a shortage of men?

The fact is that there has been a tremendous surge in air travel in the last several years, and the FAA wasn't prepared for it. The FAA itself underestimated the growth of the industry, and this error was compounded by the agency's inability to obtain funds to add any new controllers.

The San Francisco tower is operating with the same number of controllers today that it had in 1963, Merkel says. There has been a staggering increase in the amount of traffic, however.

What happened, then, was that the same work force had to absorb the extra load, and the pressure built up.

Subsequently, with substantial industry support, the FAA obtained a supplemental appropriation, and has been conducting an intensified recruitment program since the first of the year. Eight on-the-job trainees are learning the ropes at the San Francisco tower now. But it takes a long time to learn the business well enough to work in a tower like this. Most of the men now in the tower have ten to twelve years' experience.

The air transport problem is bigger than the shortage of controllers, however.

'If I put ten or even twenty bodies up in here'—Merkel gestured around the tower—'it wouldn't move the traffic any faster. We're limited by taxiways, runways and air space, by the number of planes in the air in the area, and even the number in movement to other points.'

There has, in fact, been a revolution in air transportation. And its magnitude can be read quite easily in statistics from San Francisco airport alone.

Passenger volume reached 13.4 million for the year ended June 30. That was an 18.7 percent increase in a single year. And it was more than all passengers on all scheduled airlines in the country twenty years ago.

By the end of 1968, Merkel estimates that the rate of annual movements—landings and takeoffs—at this airport will be 370,000. About 20 percent of this total is general aviation and military. The rest is airline.

Right now, this airport is averaging one operation—a landing or takeoff—every forty-five seconds during the busy periods; every minute, during slower periods of the day.

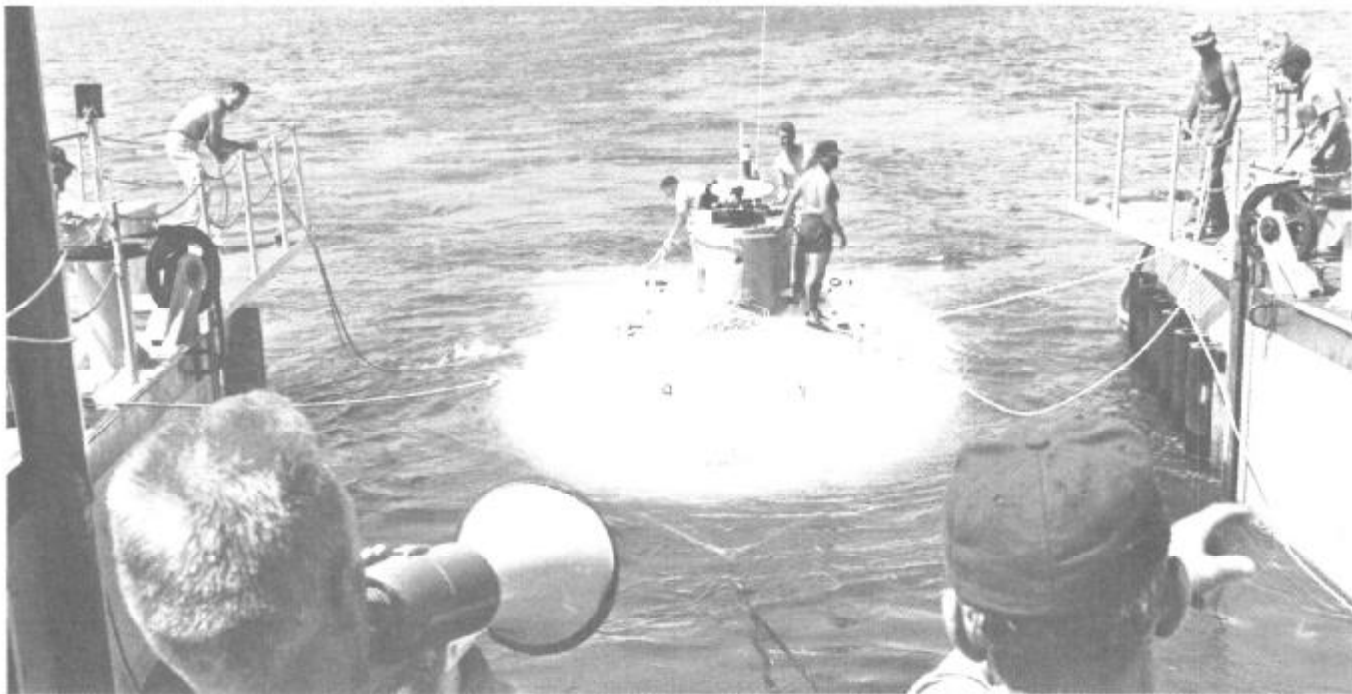
The long-range problems are for others to solve. For the controller on the job, hunched over his radar, or peering out of the tower, the problems are more immediate—getting each plane to where it is going, with an adequate safety margin.

It's a job that often builds tensions.

But they aren't apparent at the surface. In the tower the controllers seem relaxed, comfortable. Generally, they wear sleeveless white shirts. One is probably chomping on a cigar. They go about their business calmly. Their lightweight microphone headsets are attached to the radio equipment by long, spiral cords. Occasionally one gets up and walks to a window to peer out, just to be sure of what's there, stretching his umbilical cord behind him. For all the radar, keen vision is important.

It's much easier to get a feeling of excitement by reading the newspapers and magazines than it is by visiting a control tower on a typical day.

But that is as it should be. What pilot or passenger would like to think of his controller as excited?



The little sub is designed for work on the ocean floor and has descended to a depth of 8,300 feet

DEEP QUEST

by Bob Lindsey

At dawn one morning last winter, a strange vessel which faintly resembled a gigantic white watermelon disappeared into a fog-blanketed patch of the Pacific Ocean ninety miles west of San Diego.

She was a new breed of submarine. Although she will carry scientists more than one mile into the ocean's depths, the Deep Quest, as the squat, four-man craft is called, is more than another fragile new bathyscaph.

She is a working submarine, intended to take not only scientists but military men and a new profession of 'ocean miners' to the ocean floor to hunt petroleum and precious minerals.

The Deep Quest, which set a world diving record at 8,310 feet that day, is more than a new kind of sub-

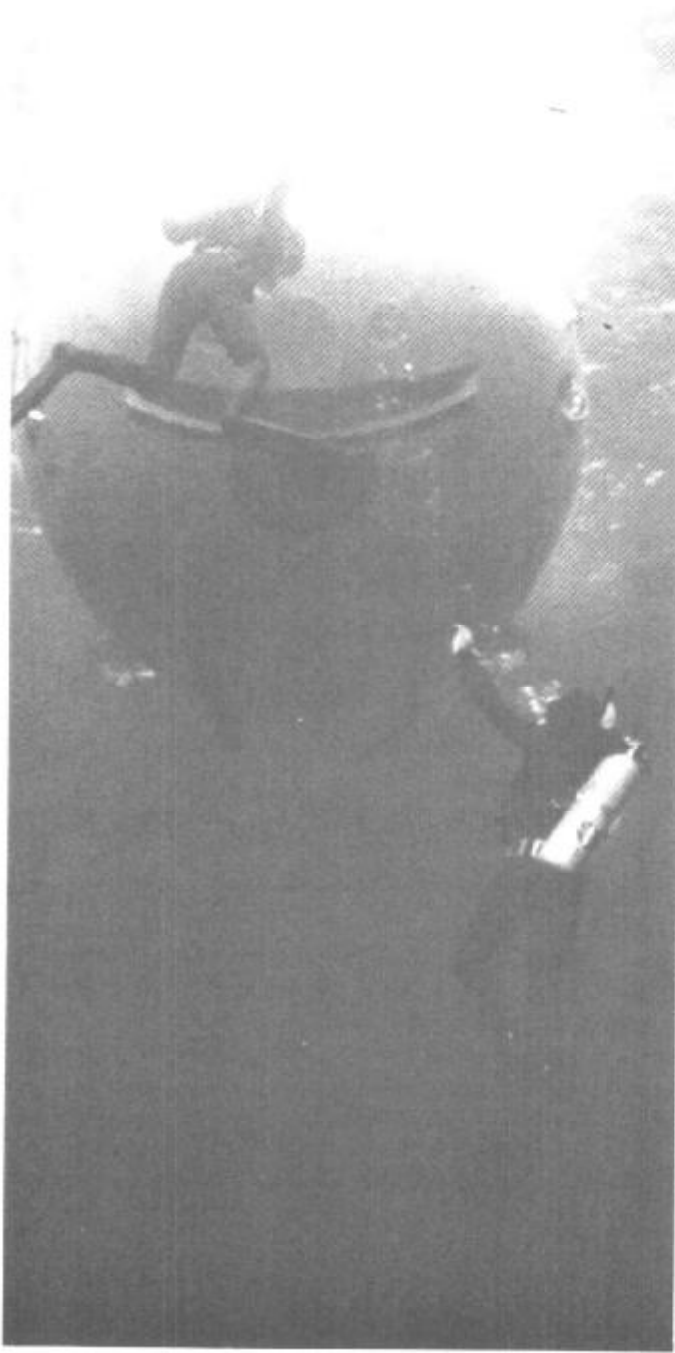
marine.

It is the flagship of the most ambitious and probably the most successful, diversification program ever undertaken by a major American aerospace firm.

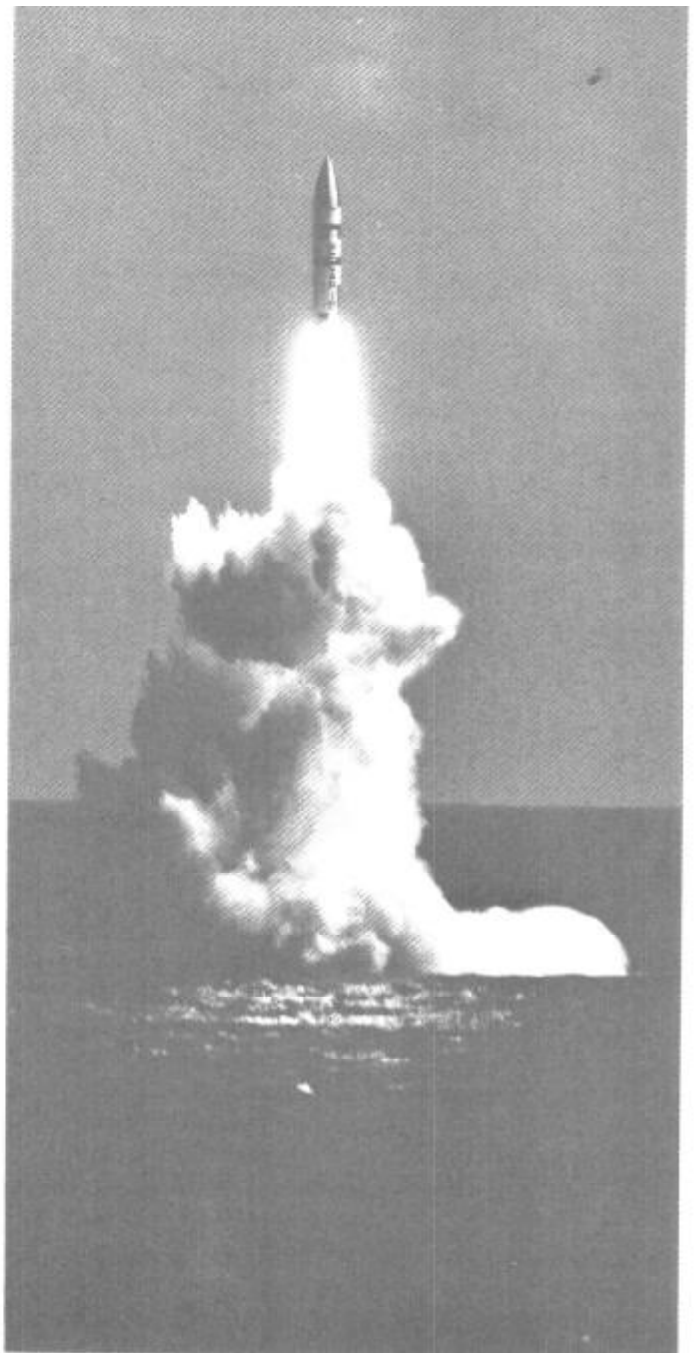
It was built at Sunnyvale on lower San Francisco Bay by Lockheed Missiles and Space Company, creator of the Polaris submarine missile and America's work-horse space satellite, the Agena.

While the Deep Quest was making her record dive, Lockheed itself was making a variety of other strange thrusts:

—At the Mayo Clinic, a team of Lockheed engineers was in final stages of designing a computerized information system to speed up the flow of vital medi-

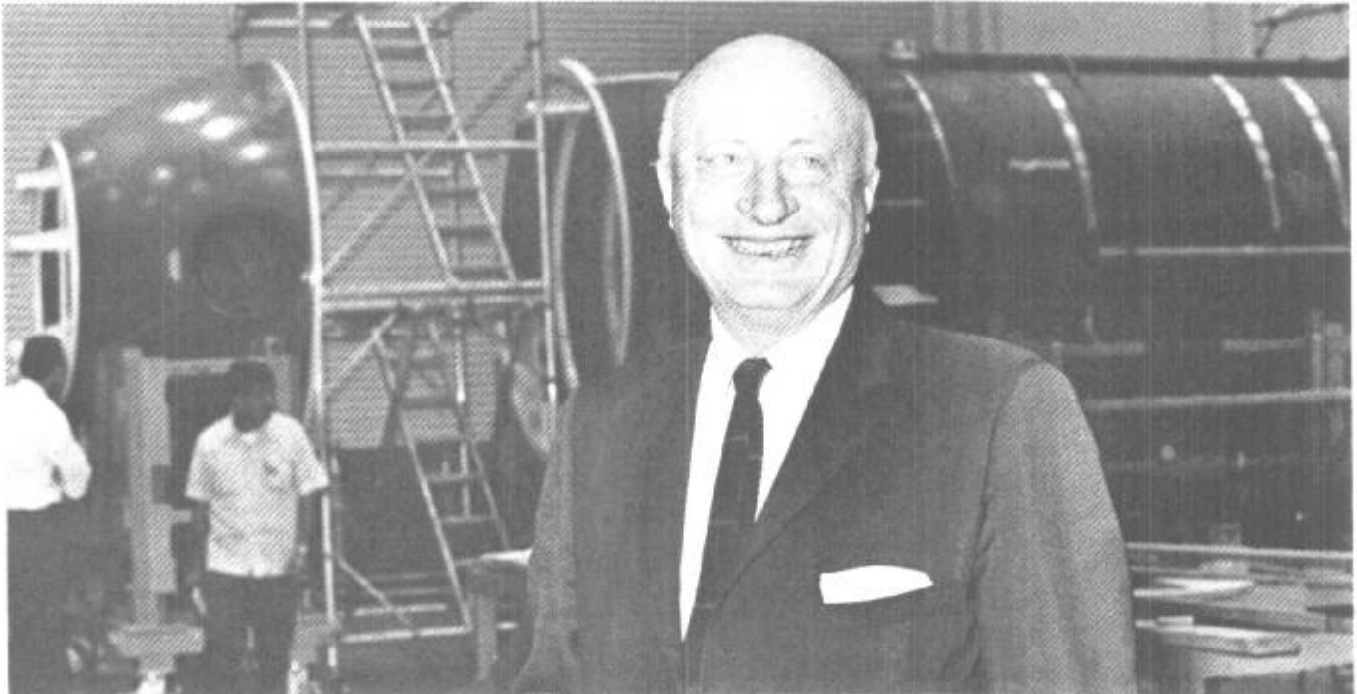


Frogmen inspect Deep Quest at start of each dive.



The Polaris ballistic missile, another Lockheed product, gives U.S. submarine fleet hitting power over 2,500-mile range.

The Twister is a multiple-jointed personnel carrier which is expected to help the Army around many a tight corner



Elmer J. Wheaton, Lockheed vice president of research, with the company's new deep submergence search vessel

cal facts among physicians and other staff members;

—At a low-income neighborhood school in San Jose, a group of aerospace engineers and professional educators from Lockheed conducted a pilot program seeking ways to motivate minority children so they want to excel.

—In Sacramento, Lockheed engineers briefed state officials and law enforcement officers on a new computer criminal identification system which should go into operation next year.

—In the state capitols of Alaska and Massachusetts, Lockheed aerospace engineers were designing information systems to cut governmental red-tape and speed the flow of facts among state agencies.

—In the hills of central California, a new kind of eight-wheel, truncated battlefield assault vehicle called Twister showed the U.S. Army high speed mobility on virtually any terrain.

—At Sunnyvale, representatives of a large eastern utility company learned how H-Bombs could be used to free vast reservoirs for natural gas in Oklahoma.

—At an Air West passenger counter at San Jose Municipal Airport, an experimental gun detector, developed by Lockheed as part of the national effort to prevent 'sky-jacking' of aircraft, was tested.

—In San Francisco, Lockheed engineers and police discussed new and unusual non-lethal techniques to control rioters.

And overhead, a tiny, glider-like muted airplane called the QT flew, unheard. It was developed by the Sunnyvale group for silent reconnaissance in Vietnam.

These are representative samples of how a major industry (with 25,000 employees it is the San Francisco Bay Area's largest industrial employer) has invaded new worlds.

This came about after a sudden, jarring shift in U.S. defense spending policies hit Lockheed in 1964. Explaining what happened then, one executive said:

'We decided to do the kinds of things we do best, but apply them in other fields, and not compete with existing industries.'

Lockheed's management looked inward and con-

cluded the 'thing we do best' was tackling very large and complex development efforts, such as missiles and applying the most advanced technology to solving the problems they posed. They also decided their experience in using electronic computers for aerospace calculations could be used elsewhere.

To head the diversification thrust, Lockheed sent Elmer J. Wheaton, a genial, almost patrician figure, who had helped develop the DC-8 jet airliner and Thor missile while at Douglas Aircraft Corporation.

Named Lockheed Missiles and Space Company vice president for research and development, Wheaton was told: 'diversify!'

In barely four years, Wheaton has ferreted out scores of ideas for diversification and steered the course which led to the record dive by Deep Quest off San Diego in February.

William Rieke, now executive vice president, said of Wheaton's team:

'They're the most innovative group of people I've ever seen.'

Lockheed executives are quick to emphasize that missiles and satellites are still their main stock-in-trade. And they concede diversification programs are still small compared to total sales.

But, they've all changed their minds about an axiom that used to be taken for granted—that the aerospace industry can't succeed in other fields.

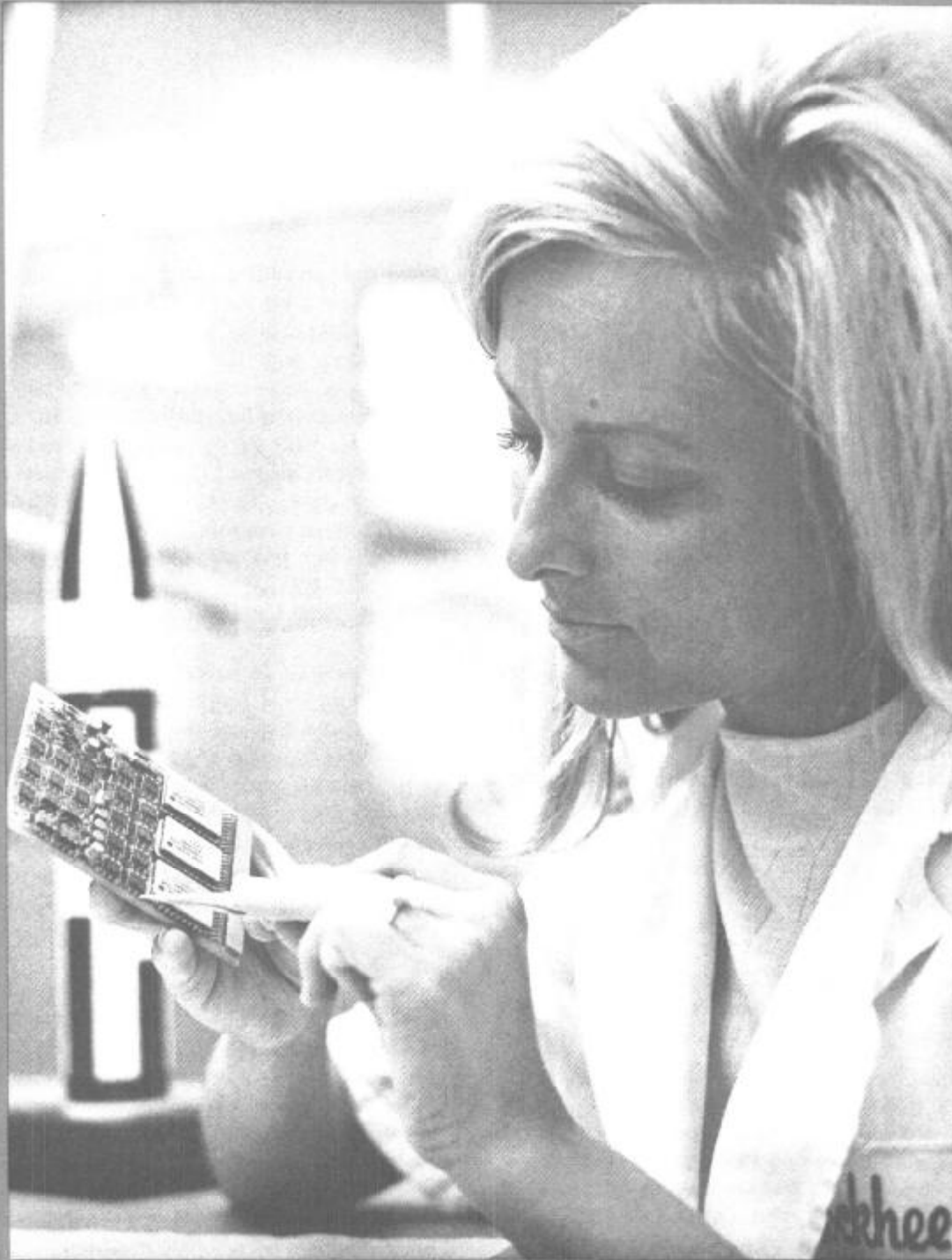
Already, Lockheed is feeling the effects of its independent diversification efforts. Impressed with its design for the Deep Quest, the Navy selected Lockheed Missiles and Space Company to build two deep-diving subs to rescue submarine crews who may, someday in the future, be stranded on the ocean bottom.

And just a few weeks ago, the diversification investment paid off again. The Navy awarded Lockheed a contract, expected to be worth more than \$20 million, to build another new super submarine. Called the Deep Submergence Search Vehicle, it will take men 20,000 feet into the ocean's depths to hunt for and salvage objects lost in the sea.

That, in a nutshell, is how far Wheaton's team will go to diversify.

END

THE LOCKHEED GIRLS



Pamela

by Lee Tyler

Remember the old song, 'Rosie, aa-aa-aa-aa-aa-aa-aa, the Riveter'? It isn't like that any more.

At least, not in the aerospace business as I found recently by visiting the Lockheed Missiles & Space Company in Sunnyvale on the San Francisco Peninsula.

Gain admittance to any of the huge buildings spread around the plant's six hundred twenty-five acres and you find the predominant sound is a quiet calm hum—rather like the running of a refrigerator.

Of twenty-five thousand employees working for Lockheed in aerospace, almost one quarter are women. Girls work as biologists, metallurgists, engineers, computer operators, many as clerical help, of course, and many more as electronic assemblers.

It was in this latter job category, in Building 151, Column C-4, that we became smitten with 20-year-old Pamela Schreckengost, of San Mateo.

Working on the swing shift from 4 p.m. to midnight, she's one of Lockheed's youngest employees and is, in the words of her manager, 'a living doll.'

We heartily agree.

Five-feet two, with green eyes and long swinging blond hair setting off a sun-tanned face most pleasant to look upon, young Pam is a reassuring member of her often-kookie generation.

Facing you across her round revolving Susan wheel work table, she spins off in a soft husky voice a few thoughts about her role in the aerospace age.

It's 'thrilling,' it's 'satisfying,' it's 'worthwhile,' and 'it's very, very simple,' she adds, smiling as you look disbelieving at the mammoth and complicated-looking blueprint she follows, inserting thimble-sized (and even smaller) components onto cigar-box-sized circuit boards.

'Lots of factory jobs a girl doesn't know what she's doing, but I know I'm helping to guide a satellite and

the very thought of it gives me goosepimples.'

She works on the Agena space program. Considered the workhorse of the U.S.A.'s space aims, Lockheed's Agena and its boosters have already been launched over two hundred times and will fulfill most unmanned space requirements through 1970.

Shifting her slacks-clad, oversized-jacketed (but still discernibly shapely) body, Pam adjusts her granny-style safety glasses, reaches for a no-nonsense soldering iron, and tells us something more about herself.

This is her first job. She's been at it a year and a half already, led on to Lockheed by an aunt and an older sister. Now her father's working for the company too.

One of four children, she's a student at Foothill College in Los Altos, Calif., where she majors in physical education, intending one day to teach gymnastics. She's active in the National Cheerleaders Association which runs summer camps in Oregon and Washington and at California's Squaw Valley where high school and college cheer groups come to learn new stunts and routines.

Water skiing on the San Joaquin River is her favorite sport and though her boyfriend's trying to get her interested in skindiving, she, to date, finds it 'frightening.'

She likes the 'calm atmosphere' of Lockheed's Column C-4 where her working companions are men and women years senior to herself.

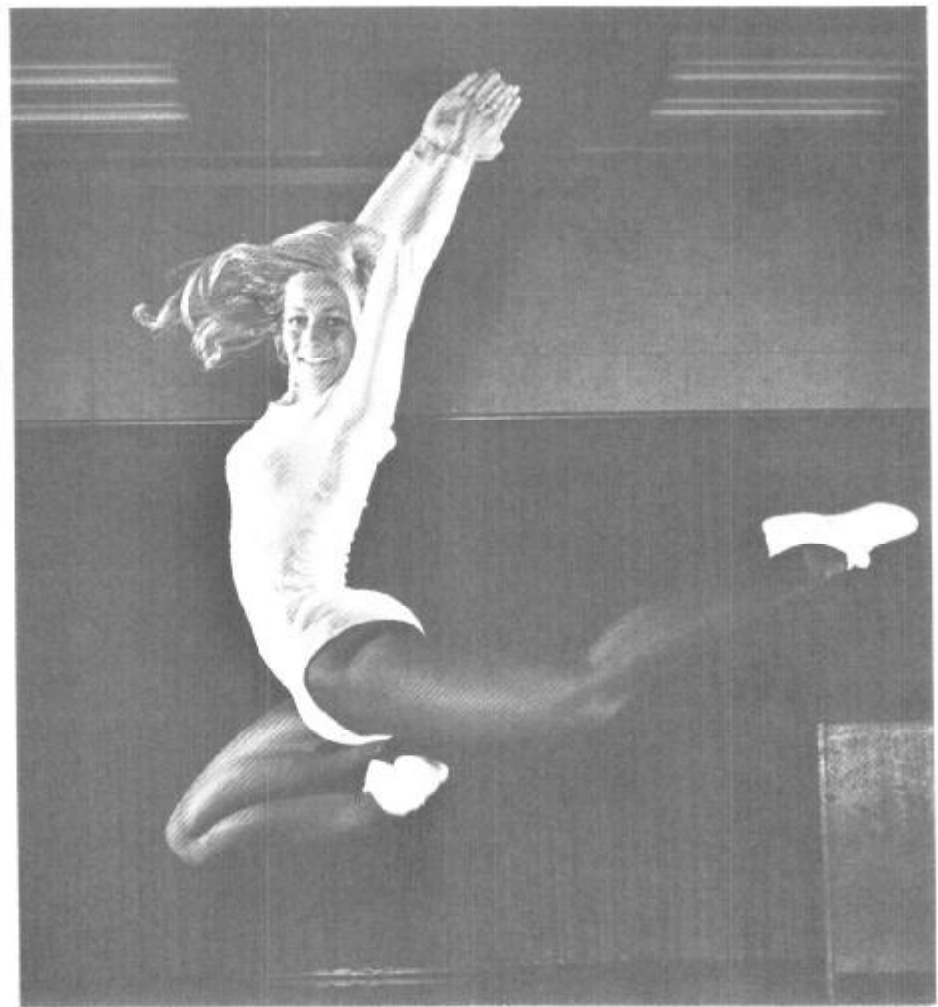
It took forty hours of instruction to master her job, and, no, it never gets boring. 'All it takes is one tiny little wire put in wrong . . .' she shudders, with purposeful seriousness.

This particular day-night, her quota of completed circuit boards was four and, her interview and photo-taking completed, we left Pam in peace.

Like the new Miss America,



Pamela Schreckengost is good-looking, inspirational,



talented and acrobatic



James O. Snedden photo

HELL'S CANYON CRUISE

by Byron Fish

As the Snake River flowed westward through Idaho, covered wagons followed its relatively easy arc until they came to what is now the border of Oregon. There the Snake ridded itself of company. Turning north at Farewell Bend, it rampaged through a gorge more than a mile deep and so unnavigable the pioneers named it Hell's Canyon.

Hell's Canyon it remains, even in these days of high-horsepower boats. Nobody ever ran it the whole way upriver, and many who tried the stunt downriver bashed up in the rapids.

Dams at the upper end of the gorge now cut off passage clear through. Below, where the gorge is deeper than that of the Colorado's Grand Canyon, the country is still wild.

It is approached from Lewiston, Idaho, where boat trips started a century ago. Sternwheel steamers rammed and winched their way as far as they could, to unload supplies for gold seekers and the later homesteaders who had no other road to their isolated ranches.

The steamboats disappeared in the 1930's but a gasoline-powered boat continued a weekly run with mail and supplies. A 'space available' sideline developed, carrying passengers who wanted to go along for the adventure.

It was adventure, all right, to crash through more than one hundred sets of rapids, but it was done for business. As fun, it waited until the development of

strong, dependable outboard motors within the past twenty years and, recently, the inboard jet-boats.

Floyd Harvey, a Lewiston businessman who runs Hell's Canyon Excursions because he loves the river, depends upon a jet boat with a 289-cubic-inch Ford Interceptor engine. Many a passenger, while leaping and bouncing through the billows and flying spray of the Wild Goose or White Horse Rapids, has directed his prayers to the Ford Motor Company.

The mailboat still takes passengers, and a couple of Lewiston guides offer charter excursions for camping and fishing, but Harvey's operation grew up especially for tourists and is complete from end to end.

His twenty-four-foot steel-hulled boat, drawing only eight inches at cruising speed, leaves Lewiston early in the morning for Willow Creek, a camp he built ninety-three miles up the river. At Johnson Bar, four miles farther, the Snake stops all but stunt drivers willing to risk their lives trying to climb rapids that are actually low falls.

The Snake breaks you in gradually. It moves right along, but for the first twenty miles out of Lewiston it is wide and flows between the low, brown hills of Idaho on the east and Washington on the west. The longest-lasting road follows the Washington shore to the Grande Ronde River, where the hills grow higher and the Oregon border soon is passed on the right.

Meanwhile, the river has kicked up an 'eddy' here

Reprinted from The Ford Times, August, 1968

and there. You think you have gone through some 'rough water.' Ha! Now, rounding a corner, you see a wildly foaming rapids. The jet boat charges through it headlong.

Knowing the major rapids have been named, you inquire (when your teeth stop rattling), 'Which one was that?'

The pilot, relaxed on his seat, thinks for a while before venturing a reply. 'There are so many,' he apologizes, 'I can't remember the names of all the little ones.'

The boat smashes through two or three more little ones and rounds another bend. Up ahead is something that makes the previous turbulences look like ripples.

The pilot unrelaxes. Standing, he drives the boat straight at one bank, cuts within six feet of a jagged boulder and whirls the wheel. The boat skitters on a diagonal course across the leaping water. Just as suddenly he reverses direction. We are climbing the river by the switchback method.

River pilots used to memorize all the rapids and their channels, and rememorize them with each seasonal change. Now, at least, they have target boards on the shore. By lining up two of them like gunsights, they can put the boat on a 'recommended' course. (No rebate if a big submerged rock has rolled into the channel).

During the passage of the worst rapids, the passenger pays little attention to the scenery, which he could see only dimly anyway, through clouds of spray. He is listening hopefully for the roar of a good, unfaltering motor.

The scenery grows more impressive, more towering with each mile. Periodically the canyon relents and falls back to allow a bench on which some pioneer staked his future to raise cattle or sheep, or to prospect. In the lower canyon, ranches may have a primitive road bulldozed to them from the far side of the mountains, but some still depend on the river as the only way in or out.

The last of such roads to reach the river is at the seventy-five mile mark, Pittsburgh Landing. The 'ports' along the river are bits of sandy beach into which a boat can ram its bow and back off again after mail, cargo or passengers are put ashore.

Harvey makes periodic rest stops, including one for a box lunch, at points of interest such as a mine, rocks inscribed with Indian hieroglyphs, a proposed damsite

or the place where Chief Joseph and his people crossed the river in 1877 while escaping American troops.

Above Pittsburgh Landing the feeling of wilderness increases. The mountains on both sides now rise a mile over the river. Each stream they discharge into the Snake sets up a conflict of currents and more rapids to negotiate. The passengers have become used to it, though. It is no worse than riding a bucking bronco.

Here at full power the boat can average about ten miles an hour, but a sense of exhilarating speed is given by the opposite rush of water. It is almost disillusioning to learn that no excursion ever has had a serious accident, and that natives familiar with the river have jumped in, wearing a lifebelt, to bob down a rapids personally.

Nevertheless there is a thin line between the safe combination of caution, a dependable motor and the pilot's knowledge of the channels, and disaster. It is just enough to keep the trip adventuresome, yet leave it open to whole families.

Willow Creek splits the difference between comfort and roughing it. You sleep in tents, but they have floors. Water is piped in, but it is cold. The toilets are pit type, but a gasoline-run generator supplies electric light. The mess tent is the social center, and the meals are huge.

The camp, reached in midafternoon, is sheltered behind a cliff, and in this nearly desert country is distinguished by a grove of pines. A sandy beach, rare in its length, extends several hundred yards. Since summer temperatures can go well over one hundred degrees in the rocky canyon, no fancy resort pool furnishes more fun for the children than the dunking-shallows of the cool river.

On one trip several fathers took their sons to Willow Creek—on a stag party, and I suspect we never will hear the last of it. My three have traveled quite a lot, but Hell's Canyon out-rated all else.

For one thing, Harvey has a trapshooting mechanism that hurls clay pigeons out over the river. The shotguns roared as long as a father could be wheedled to supervise the proceedings and dole out ammunition.

A Forest Service trail on the mountainside invites

James C. Sneddon photos



Piloting the cruiser, Harvey fixes an unwavering eye on the water signs ahead



Harvey and Oregonian Clyde Monahan examine an ancient Indian history book found along the Snake River

exploration. The beach invites doing nothing. But then there are fish to catch, including that strange monster, the prehistoric sturgeon.

A freshwater Oregon sturgeon's size seems to be determined only by its food supply and how long it lives. It goes on growing until it is twelve to fifteen feet long and weighs half a ton.

The Snake River, the Columbia into which it flows, once yielded sturgeon that big, but they were fished out and a ten-footer now is considered large. Three feet is under legal limit, and you also have to throw back one longer than six feet, to help preserve the species.

Before sturgeon were protected, river residents herded them to market. The fish were too big to drag into a boat, but so sluggish they could be tethered alive. The fishermen would catch half a dozen, six to ten feet long, then lead them down to Lewiston where they were thrown on a truck and hauled to Portland.

At Willow Creek we kept a seven-foot pet for twenty-four hours. The fish was staked to the beach by a rope around its tail, and the boys pulled it in occasionally for their amazed scrutiny. When we turned the sturgeon loose, it swam away quite casually.

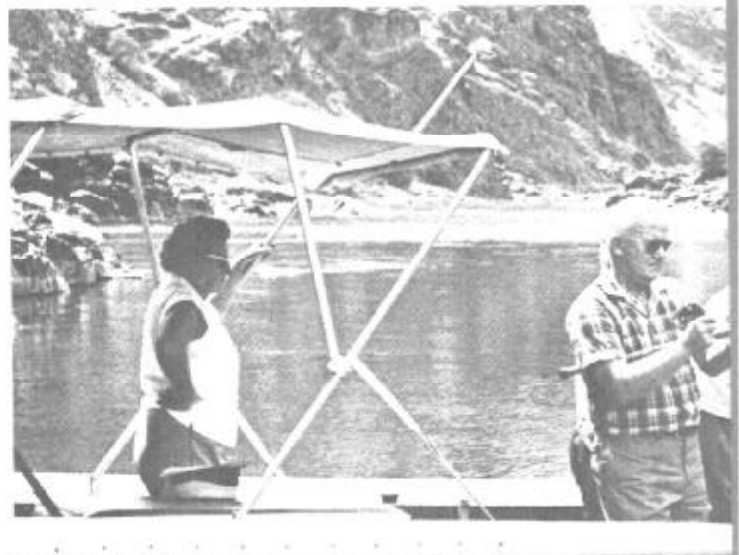
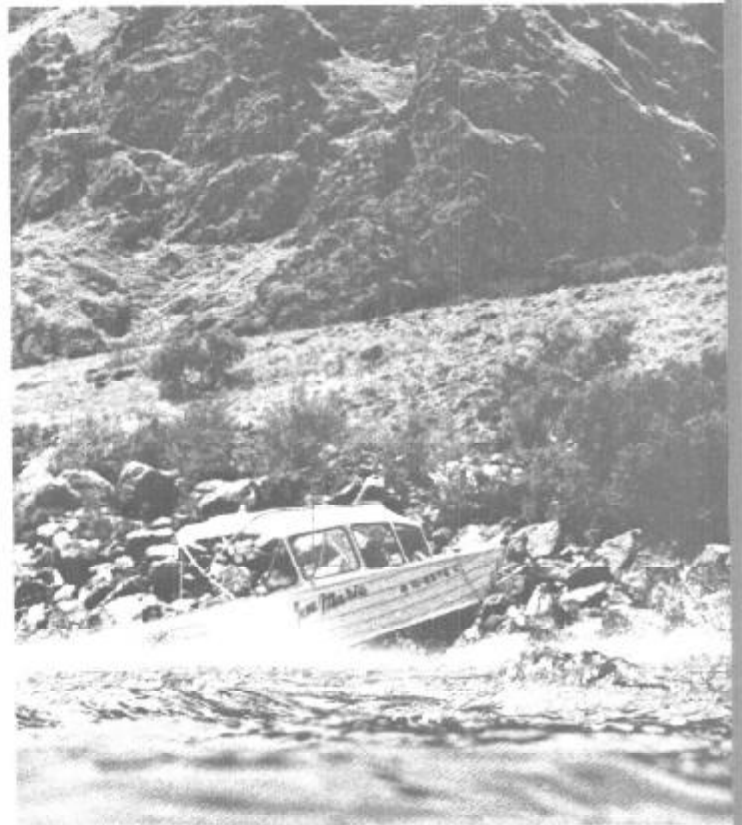
You can stay at Willow Creek as long as you wish, but the usual sixty dollar excursion (age twelve and under, half fare) returns to Lewiston after lunch the next day. Whooping downriver with the current, the trip takes only three hours.

The new thrills are the rapids you cannot see because they look like the rim of a falls—until you hurtle over the edge at thirty miles an hour. It makes for a rough ride, but by now everybody is a veteran riverboater.

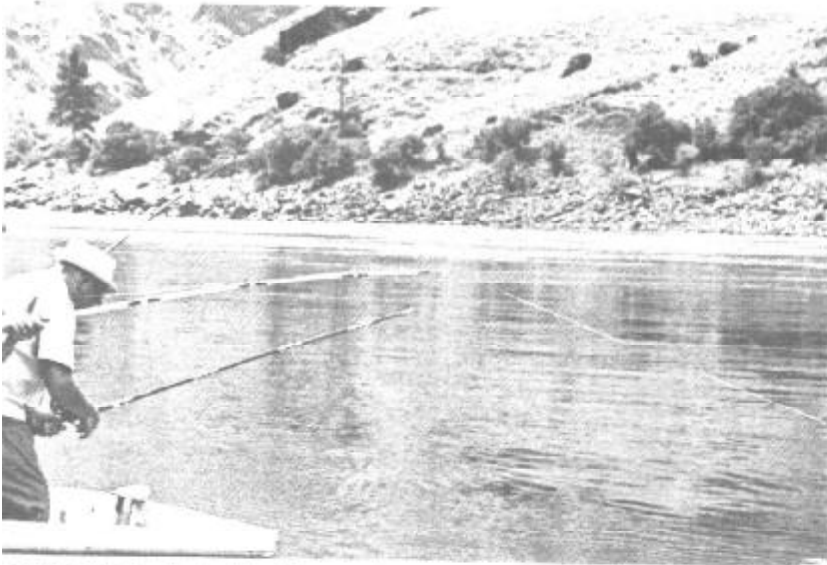
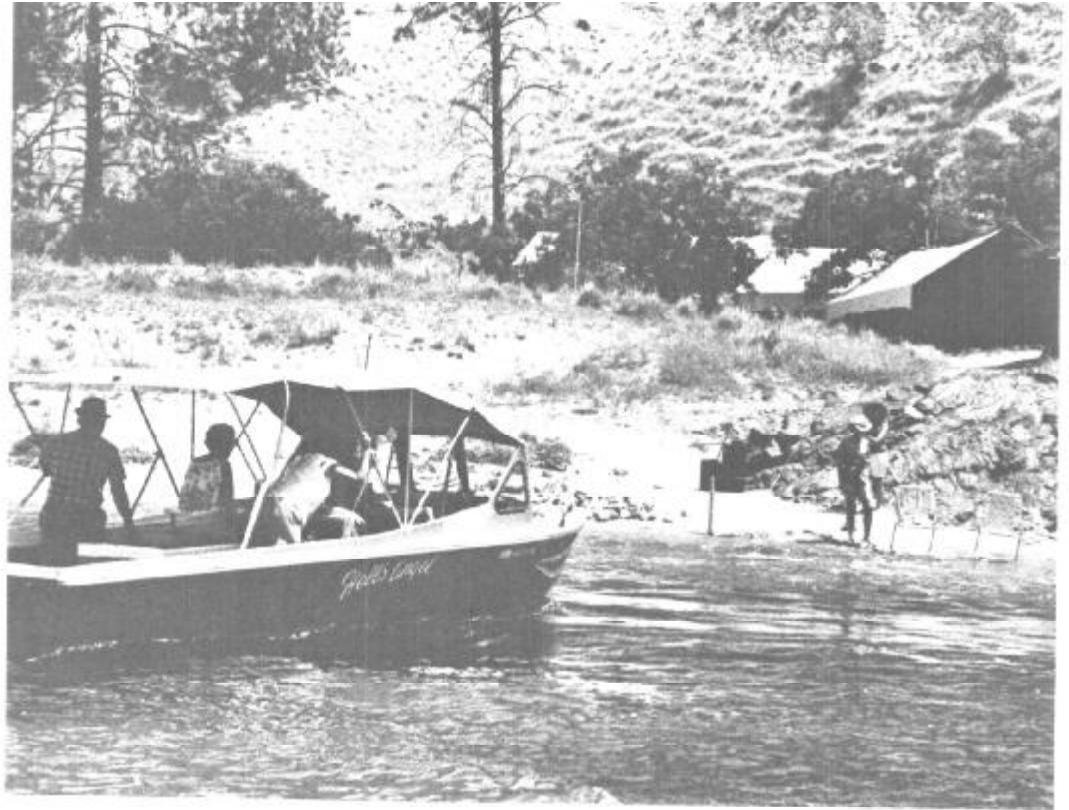
How long this unusual experience will be available is anybody's guess. The canyon would now be dammed at the lower end at High Mountain Sheep if public and private power interests had not got into such a squabble the United States Supreme Court finally threw out the case and ordered everybody to start over.

Again, though, a powerful voice will be heard, that of the conservationists. They oppose any dam that would change Hell's Canyon. It is too valuable to lose as a wilderness asset.

Under Ernie Heimgartner's deft touch, the Jean Marie Harvey glides



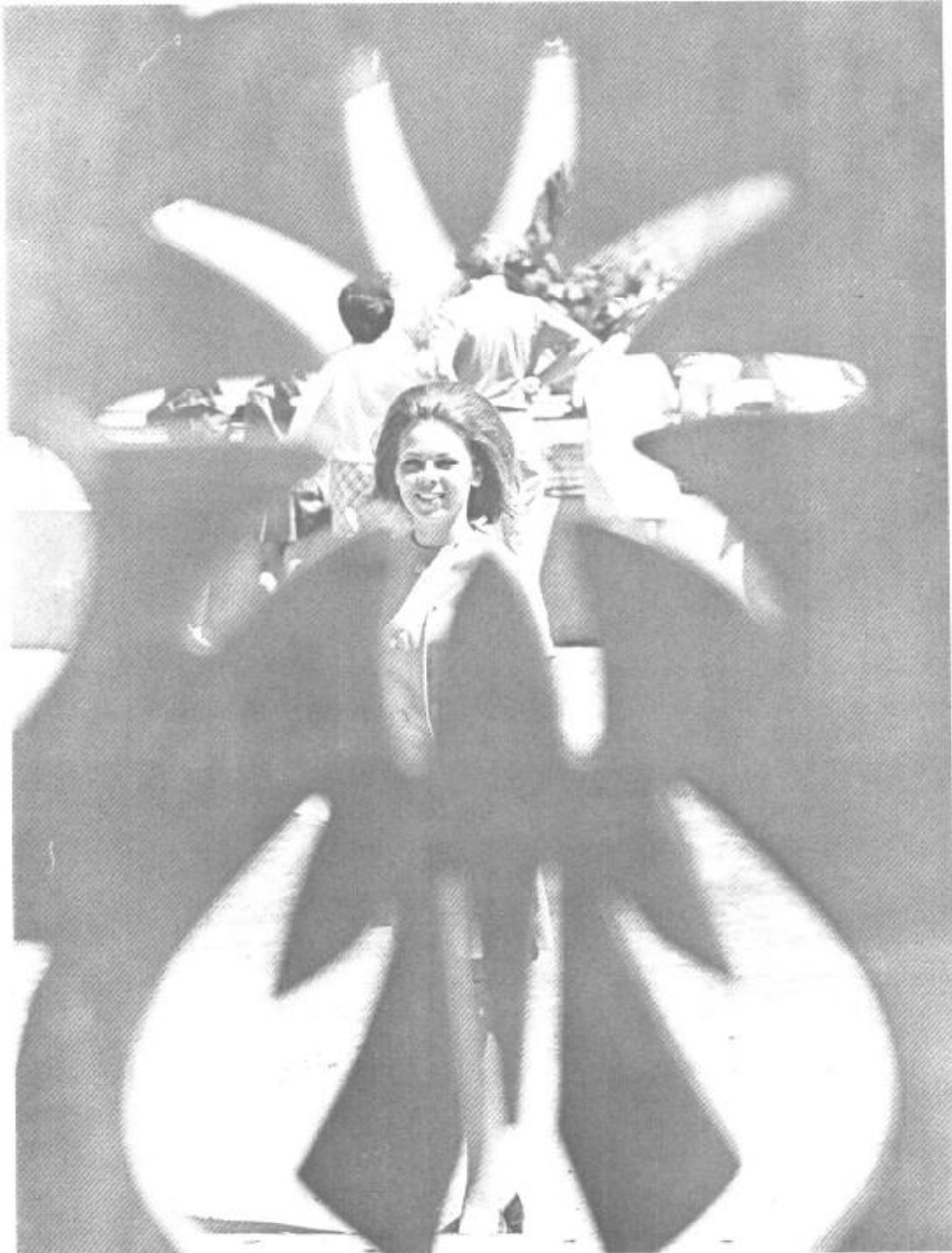
While Marketta Buckler supervises, Clyde Monahan and Waldo Buckler



investigate the Snake River's reputation as a fish-producer



Heimgartner unhooks a sturgeon they landed



Lynn Beason at Marine World

Photographed by Hugh Stratford

San Francisco's exciting new amusement complex, Marine World, was the stage for ceremonies which began the flight careers of five Air West hostesses.

It was as much a tour as it was a graduation, and the quintet was escorted by three peninsula mayors on visits with the stars of Marine World—among them, dolphins, alligators, and a cute little elephant named Judy.

The mayors were Robert Bury, of Redwood City; Dr. Morton L. Podolsky, of Belmont; and Ernest J. Nackord, of San Carlos; all cities adjacent to Marine World at its bayshore location a few miles south of San Francisco International Airport.

The young ladies whom they pinned—and busied, fraternally—were Darlene Taylor, Oakland; Sue Varner, Fulton, Kansas; Carol Lee, Bremerton, Washington; Lynn Beason, Lancaster, Texas; and Alice Mendez, Costa Mesa, California.

Joining in from the Marine World organization were Bradford Baruh, general manager, Roy Wallack, director of public relations, and Jack Stewart, community affairs coordinator. Jim and Margie Rusing introduced the new Air West hostesses to their Aqua Belles, and trainer Sonny Allen let them feed a dolphin. They prefer serving passengers.



Arnie the Dolphin warms up before the show as Air West hostesses take their first close look at a real fish-eating trick artist. Alice Mendez clutches trainer Sonny Allen while Carol Lee and Darlene Taylor get ready to run.

Sue Varner presents flight bag to one of the Aqua Belles



Carol Lee and Darlene Taylor enjoy an ice cream stop



Beason and Varner mop up the drippings



South Sea Village atmosphere inspires Carol Lee to try plastic-skirted hula



Mayor Robert Bury of Redwood City makes a short speech to Miss Beason



Snoopy and the Red Baron shoot themselves down during classic aerial duel at water show



Judy the elephant is a 600-pound ski baby

DRAGON MOUNTAIN

by Leverett G. Richards

They call it Dragon Mountain because the natives of the Highlands of South Vietnam believe it is the lair of a dragon that spits fire.

It's true. Jim R. Wiley, who has just returned to civilian status as customer service agent for Air West at Eugene, Ore., can prove it. The dragon not only spouted fire and flame, but hot shrapnel at Jim the first night he pulled guard duty at the Fourth Infantry Division's aviation battalion headquarters a few miles out of Pleiku.

'The base camp had never been hit until January (1968), the first night I pulled duty,' Wiley wryly recalls.

'We took about thirty rounds of NVA 122 mm rockets. The first round wiped out a couple of hootches about fifty feet away. By the time the second incoming round was heard overhead we were all safe in our bunkers. We never lost a man, although one was killed out on the airfield.'

One of the huge Russian-made rockets hit the center of the 2800-foot sod runway, digging a hole about six feet deep and ten feet in diameter. But by 8 a.m. the runway was back in use.

The rockets were launched from a French tea plantation about twelve miles away. The frustrating problem was that the Americans were forbidden to shoot back for fear they would hit innocent civilians. No counter fire could be launched without permission through the chain of command.

Wiley joined the Army to fight. He was inducted in October, 1966, advanced to the grade of Specialist 4th Class as an infantryman. But when he hit South Vietnam in April, 1967, he was promptly shipped to the flight line at Pleiku in the Central Highlands.

There he was given a quickie course and made an air traffic controller manning the control tower at Hensley Army Airfield, home of the 4th Division's Aviation

Battalion. The 4th Infantry was formed mainly from Oregon and Washington men and trained at Fort Lewis, Wash.

Things went pretty peacefully—but almost as busy as an Air West station—until the Viet Cong and the North Vietnamese communists attacked in violation of the sacred Tet holiday.

The Army lost a couple of jet-powered helicopters—Hueys—on the ground. But that was all. There were a few attacks on the perimeter, but nothing more than harassing action, Wiley reports. Two of the big Russian-made 122 mm rockets, six feet long and a foot in diameter, failed to explode. After the first major attack the camp would get five or six rounds some nights of random, harassing fire.

The enemy concentrated, instead, on the unarmed civilians in the provincial capital of Pleiku about seven miles from Dragon Mountain. The surprise attack carried about halfway down the main street of the town before South Vietnamese troops drove the attackers out.

Wiley was called out along with a 'reactionary force' of cooks, clerks, typists and headquarters types to help police up Pleiku early the next morning.

'The communists had burned down half the Strip, a street of shops and laundries leading to the town square, says Wiley.

'They had butchered at least one hundred women and kids. They were lying in pools of blood all over the area.

'The ARVN (Army of South Vietnam) had done a good job in driving out the communists in hand to hand fighting, from what I saw. But we rounded up about twenty VC prisoners and killed a half dozen who put up a fight. Then we had to clean up the bodies and clear



Main control tower, Hensel Field, 4th Division base camp, Pleiku



Portable tower, complete with light gun and fan to keep the controller cool

Finally, back in the states, the sign that says Fort Lewis looks good to a repatriated Wiley while waiting for his hitch to end



Wiley's last army assignment was flight dispatcher



DO YOU HAVE
AIRCRAFT CHECK LIST
FLIGHT PLAN FILED
WEATHER BRIEFING
ENROUTE CHARTS & FREQ.
TERMINAL CHARTS & FREQ.
FLASHLIGHT
SURVIVAL GEAR
HELMET APM 5

HAVE A SAFE AND
PLEASANT TRIP

Even in the Army, as in Air West, a safe and pleasant trip is the greatest virtue

The bars had been off limits to military personnel before Tet, Wiley said. After Tet, the whole town was off limits until early April. About the time he left, in April, the shops were open for business, homes were rebuilt, and things were pretty much back to normal.

But hundreds of GIs were short of uniforms. The soldiers relied on the South Vietnamese hand laundries in Pleiku, most of which had been burned out by the communist terrorists.

The Army took to patrolling the area at night in Huey helicopters equipped with a sniffer device that could literally smell any body of prowlers in the dark—although the mechanical snooper couldn't tell whether they were friend or foe. Since most of the area surrounding the base was cleared of inhabitants and posted as a free field of fire, anything that moved at night could be classed as hostile, however.

During part of his year's tour in Vietnam, Wiley was assigned to Oasis, a fire base fourteen miles east of Dragon Mountain, about thirty miles from the Cambodian border. In this jungle country military convoys were hit by snipers and Viet Cong mines regularly during the Tet attack.

At one time Army pilots spotted one hundred fifty VCs herding a whole village of Montagnards toward the base camp. The VCs had staged a harassing attack the night before on the Army's Camp Holloway, close to Pleiku, and apparently were holding the Montagnards as hostages or porters.

Otherwise Oasis was comparatively peaceful, with little to attract VIP visits or the USO.

Dragon Mountain, on the other hand, was as busy as many a small town airport, with up to twelve hundred takeoffs and landings in a month.

The tower had the problem of controlling traffic ranging from helicopters which could go straight up or backwards, to the four-engined jetprop C-130 transports which could just barely get in and out of the tiny strip at its 2,500-foot elevation.

by night. It got hot enough in the Vietnam summer, January through March, to burn out the makeshift radio transmitters and receivers installed in truck vans. Later standard FAA aeronautical radios were installed in a permanent tower.

In the cool season from October to January it was frosty at night and extra covers were required. When the fine red dust wasn't choking you during the dry season, water was running literally waist deep in the drainage ditches alongside the hootches, Wiley recalls.

(A hootch is anything with a roof on it, be it house or shack.)

Before the Tet attacks, the Vietnamese and Montagnards who worked around the base had little to say about the Viet Cong, Wiley reports.

'But after the slaughter of women and children by the communists, the natives were violent in their expressions of hatred.'

Wiley asked one Vietnamese girl what she thought of the VC and she spat in open defiance and said: 'VC number 10.'

(Number One is tops. Number 10, or 'Number one thou' is the height of hatred or contempt.)

The inevitable question: How goes the war in Vietnam?

'We are undoubtedly winning the war against the communists. But it is an endless task—maybe twenty years to root out the VC.'

'We should continue building up the ARVN to the point where it can take over the fight.'

Jim finished his Army tour at Fort Lewis in October, and is home now with his wife Carrie and sons Bryan, 7, and Brad, 3.

He was born in New Mexico, but lived much of his life in Bend, Ore., where he was graduated from Bend High School in 1960. He joined Air West in 1960 at San Francisco, transferring to Eugene in 1962. He attended Junior College at San Mateo for a year while in San Francisco.

SPAD



Directed by Herb Shannon
Photographed by Hal Lowe

My name is Spad, which by curious coincidence is also the name of a famous World War I airplane. I'm truly alive and working in southern California.

I hope you don't confuse me with that imposter beagle who happens to bear a slight resemblance. He's just an actor in a Schizophrenic comic strip. It's strictly a Peanuts operation.

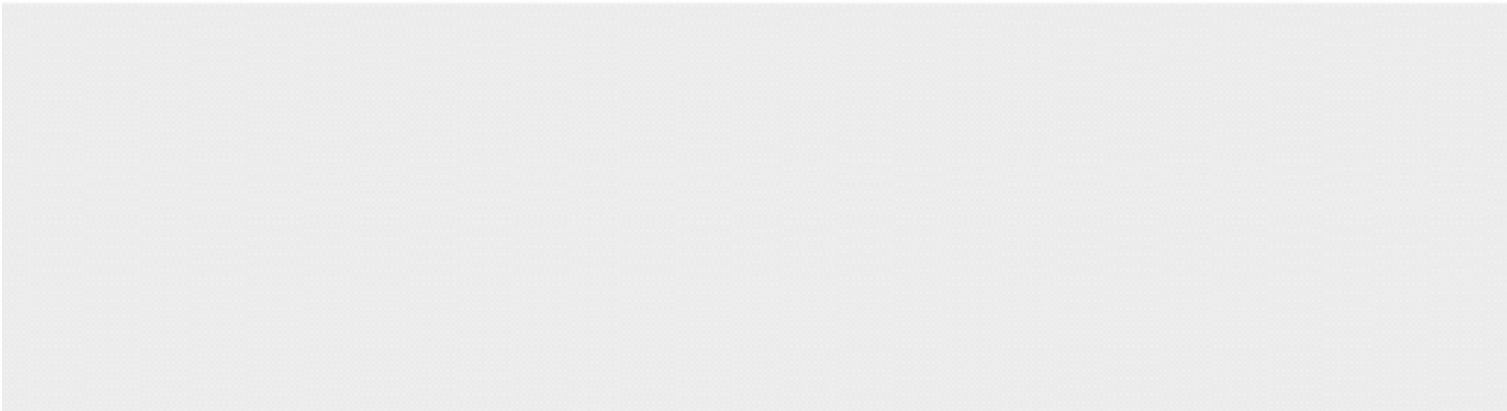
I'm steadily employed as mascot for Catalina Air Lines and usually can be found hanging around headquarters at Long Beach Airport. Why else would they

call an airplane garage a hangar?

My job is to see that our amphibious Grumman Goose seaplanes flying to Santa Catalina Island twenty-six miles off the coast make convenient tourist connections with Air West's daily schedules into our mainland terminal at Long Beach.

It's a good job with some magnificent fringe benefits, including the use of available props for imaginary returns to a previous life. No cracks about cats and their supposed nine lives, please. That's an old cat's tale.





AIR WEST

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Byron Fish, whose article on a Snake River Boat ride won a first prize award in Air West's writing competition, is a Seattle free-lance writer and regular contributor to the Seattle Times. The same story also was selected by The Ford Times and published in its August issue. The photographs were taken on a subsequent trip by James O. Sneddon, director of photography for the U. of Washington.

Bob Lynne is editor of the Peninsula Midweek, Burlingame. Tom Bullock is staff photographer of the Advance-Star, also Burlingame. Norton Pearl is a well-known United Press photographer and proprietor of Norton Pearl Photography, Burlingame. So much for Burlingame.

Bob Lindsey is aviation editor, and Lee Tyler is travel editor of the San Jose Mercury-News. Leverett G. Richards is aviation editor of the Portland Oregonian. Herb Shannon holds the same position with the Long Beach, Calif., Independent & Press-Telegram, for whom Hal Lowe is suburban reporter-photographer.

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Editorial

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