

1961 COLLAPSE AT WHEELER

Almost hidden from view on a hill on the north side of Wheeler Dam lie mounds of broken concrete and steel. Weeds and vines shroud the crumbling cement slabs as surely as time itself has concealed the awful events of June 2, 1961. That date produced one of the Tennessee River's most devastating accidents.

It was 1961 – man was going to the moon, TVA was nearing the nuclear age, and a new lock was going up on the Tennessee River. Work was under way on a second lock at Wheeler Dam, located between Florence and Decatur, Ala (RM 275).

Dynamite blasts were set off daily at the new lock, spewing rocks throughout the site and shaking the ground.

The new lock was being built near the north bank adjacent to the old wall. Crews of about 40 men were working through the night on that evening of June 2 to get the job done.

Unknown to the workers and engineers,

Wheeler lock had a fatal flaw. And the flaw that had gone undetected for four decades was about to bring the house down.

A one-sixteenth-inch to three-eighths-inch band of clay lay beneath both the old lock and the new construction site. It was the same color as the shale layers above and below it – lying beneath the massive walls like a time bomb. The blasting for the new lock started the clock ticking.

Tests detect the clay layer. It remained concealed from the engi-



Jack Peck Horace Hamner

Lock operator Horace Hamner and his nephew Jack Peck were at the lock when it collapsed 41 years ago. Their stories appear on pages 15 and 18.



Story by
BOB STANSELL

And
the
walls
came
tumbling
down



detect the clay layer. It remained concealed from the engineers when work began on the new lock nearly 30 years later.

A TVA report that summer stated: "It (clay layer) was not detected in the calyx holes because it has the same color as the contiguous shale and both the shale and the seam were recessed by the grinding action of the chilled shot used as the cutting medium.

"Accordingly, the stability of the existing land wall was evaluated on the assumption that the cores from the drill holes correctly reflected the condition of the underlying foundation, and the steps taken in constructing the new lock were predicated on the stability of the old lock wall as thus evaluated."

On June 2, 1961, at 9:30 p.m. with blasting for the new lock just yards away – time ran out for the old lock. The huge blocks of concrete making up the north wall of the lock began to move. The 52-foot high lock was full of water, and the upper gates were open. Most of the 436-foot wall moved 30 feet toward the bank and toward the construction area of the new lock where about 40 men were working under the lights.

The block holding the lower gate also gave way, creating a fissure that allowed water to pour through. The lower gates were ripped off by the force of the water, and part of the concrete wall after moving outward, collapsed inward into the lock.

Collapse registered on seismic devices

When the walls of Wheeler Dam collapsed four decades ago, it was a "shot" heard 'round the nation.

The moving and collapse of the massive wall registered on earthquake monitors nearly 500 miles away.

The seismological stations at Cape Girardeau and at St. Louis, Mo., recorded a microseism roughly corresponding to the time of failure on June 2, 1961, according to a TVA report on the lock's collapse.

The interpretation, based on travel time and time of occurrence, shows that the origin of this shock lay in a general direction toward Wheeler, the report concluded.

Workers on the new lock scurried for their lives as water poured from the old lock into the coffer dam for the new lock. With the upper gates open, water flowed like the Colorado rapids into the lock and through the breaches below.

Remarkably, only two men lost their lives. Barge worker Coy Lindberry of Clifton, Tenn., was headed to the dam in a lifeboat to pick up another deck hand when the wall gave way. Henry Hines of Route 3, Florence, was trapped by falling concrete and drowned. Several others escaped but with serious injuries.

About 40 workers were on the job at the time, but as many as 150 would have been on the site if the break had occurred in the day time. TVA officials said as many as 450 men may have been working there in another month.

Although water cascaded through the lock for four days, flooding on Wilson Lake was never a threat. Actually, Wheeler spilled more water into Wilson

Lake in an effort to lower the level to allow closing of the upper gates. Officials said the breach was equivalent only to three of Wheeler's spillways being open.

TVA stopped the flow by placing a needle dam at the upper end of the lock and closing the doors. A commission was appointed to study the accident and tests discovered the clay layer among the shale rock. The debris was removed and the south wall, undisturbed by the accident, was also taken



Staff photo

Remains of the old lock jut from the bushes, while at right is the pier used in transporting the Saturn rocket around Wheeler Dam.



TVA photo by Orvel Dean

Left photos shows blocks 4-6 that collapsed into the lock. At right, half of the lower door lies on debris from the lock.
down.

When work resumed, the foundation for the new lock was taken down to solid rock. The smaller lock was also rebuilt on the site of the old walls.


A special commission to study the accident noted that after the failure, two weeks elapsed until the area was sufficiently unwatered so that the failure could be established as sliding within the foundation rock. During this period consideration was given to many conceivable causes including not only major weaknesses in the foundation or the lock wall but also such possibilities as sabotage, earthquake, and barges striking the wall.

When, upon unwatering, failure was found to be sliding within the shale band, all other causes were eliminated either as nonexistent or not of major significance and effort was concentrated on learning why the shale band had so much less shearing strength than had been expected on the basis of investigations made in advance of construction.

The collapse of Wheeler stopped traffic on the river until the new locks were built. That posed big financial problems for shippers, including the National Aeronautic and Space Administration. NASA was well into the space race to the moon and depended on the Tennessee River to carry rockets from Huntsville to Florida.

Roads were built around the dam and trucks were used to ferry cargo from below and above the dam. A conveyor system was also installed for moving grain and other commodities around the dam.

On the south side of the river, a road was built to transfer the Saturn rocket to a barge below the dam. The Saturn rocket was a booster used in the moon program.

Today, little is left as a reminder that 41 years ago the walls came tumbling down. Vegetation covers most of the debris from the collapse, while on the south side a concrete pier remains as a reminder that the space program took a little detour on its way to the moon. 



Yamaha – Polaris of Hamilton

Call us for your absolute best deal on
your next ATV or motorcycle

We Deliver !!!

Hamilton, Ala. 35570

Toll Free: 1-888-880-2277

www.YamahaSuperStore.com

'... My lock just collapsed'

Report of wall failure too incredible to believe

By **BOB STANSELL**
Pier Post editor

"Sarge, my lock just collapsed," Wheeler Lock operator Horace Hamner shouted over the telephone on the evening of June 2, 1961. Hamner's call to the lock operator at Wilson Dam to let him know that water was pouring into Wilson Lake was met with skepticism and laughter.

"Sarge, I'm not kidding," Hamner pleaded. "The wall has broken."

Hamner hung up, called again, and finally convinced the Wilson operator that an emergency situation did exist.

Hamner was near the lock when it fell, while below a crew of about 40 workers were preparing the foundation for the new lock at Wheeler.

"I was on duty when it collapsed," Hamner said. "We had the *Andrew B.* with a 15-barge tow coming through. We had worked the barges all day long, lifting them from Wilson up to Wheeler Lake. He was going out with the last barge just before it happened."

Hamner believes vibration from the tug in addition to blasting on the new lock contributed to the old lock's collapse.



Wheeler Lock operator Horace Hamner manned a boat using only 2x4's as paddles to rescue workers trapped by a wall of water.

"To get that whole tow moving, he had both of those huge propellers digging away. Can you imagine the vibration that was creating? Vibration is why the lock collapsed."

Workers also were using dynamite to enlarge a trench parallel to the old lock as part of the new lock construction.

"They had just finished cleaning that trench out at the upper end for the new lock," Hamner said. They had been blasting for some time. They'd drill 18-inch to two-foot holes and cram it just full of dynamite. They were already in slate – it wasn't solid rock. When they would blast, it would just go to pieces of small rock. Everything up there got rained on with rocks.

"The trench on the upper end was ready for concrete forms. About 50 workers were on the job that night," Hamner said.

When the lock broke, all the workers went to the lower end trying to escape the wall of water that tore off the lower gates and moved the whole north wall 30 feet toward the bank.

"The ones that were caught on the inside of the trench, and two men on the wall, were the first to realize that the lock was collapsing. They could feel it in their feet. They could feel it slipping."

Hamner said workers could feel the vibration from the tow as it headed upstream.

"I wasn't directly on the lock wall when it happened. I was walking toward the bank, looking directly down at the men. Then, I saw the lock coming directly toward me. When I saw that I was safe, I thought about my friend, Harvey Grymes, also an operator. I saw that he was safe.

"The pilot of the tug ran out of the pilot house and hollered, 'Hey, what's going on.'

His boat was at the upper gate where the water was now pouring in because the gates had been open when the wall gave way."

The tow, with its cargo of hazardous chemicals, was in danger of being sucked back into the lock which was now nearly empty of water.

"All the water in the lock dropped suddenly when the

wall gave way,” Hamner said. “If that boat had gone down in that lock, it would have been a terrible disaster because the first barge contained chemicals.

“I ran to the captain and let him know that he needed to get that tow out of here.

““The lock has collapsed behind you,”” Hamner said he shouted to the captain, ““and it’s drawing your boat right down in it.’ He could see it too, because cables had already started popping.”

Hamner said the captain rushed to the pilot house and gave the tug full throttle.

“Wouldn’t you know it, the bow of the boat went right on top of the barge. But he had enough momentum going forward and he was far enough out in the lake that the tug pulled everything out of danger.”

Hamner said the captain was able to zig-zag his boat enough that the bow eventually came free of the back of the barge. Other tugs on the upstream side also helped in pulling him free.

A drama on the downstream side involving another tow, the *Stanton K. Smith*, proved to be fatal.

“It was a barge from a local company,” Hamner recalled. “It had carried workers to the dam who were going off duty and heading home to the Elgin Crossroads area.”

On the lock wall was another deckhand who was to meet the barge to begin his duty shift. The barge lowered a lifeboat to retrieve him.

“The boy that was operating the lifeboat (Coy Lineberry of Clifton, Tenn.) got trapped when the wall fell,” Hamner said. “He got there just as everything went off, and it turned his boat over. The little boat ended way up on the coffer dam.”

Once the upstream barge was out of danger, Hamner said his next thought was to call Wilson Lock (about 15 miles downstream) and let them know what had happened and to expect rising water. The phone was on the other lock wall which was now separated by white water.

He found another phone and called Wilson, but the news was too bizarre for Sgt. Bryant, Wilson lock operator, to believe.

“Sarge, my lock has just collapsed!” Hamner said he told him. “But he just laughed, thinking I was playing a prank.”

Hamner called back a few seconds later and was able to persuade the lock operator that he was serious.

By that time the break was drawing quite a bit of attention, Hamner said. People were stopping and getting out of their cars, the powerhouse got word about it and the news media had been tipped that something was going on.

The lock operator at Wilson called and ask how many feet of water was flowing over the miter cell, the solid part below the upper gates that holds back the water. This number would help TVA engineers determine how much water was being dumped into Wilson Lake and if there was

a threat of flooding.

“I told him water was pouring through the locks, the gates were open and there’s just a big water fall here. I said it was 16 feet over the miter cell.”

Hamner said his report was scrambled when it was given to the news media.

“They told them there was 16 feet of water coming down on Wilson Dam,” Hamner said. “All the people on the TV and on the radio heard that – why, they were tying their boats to tops of trees.”

The reports of rising water created a mild panic for some downstream dwellers, but there was no real reason for concern.

“Well, Horace Hamner’s the one that started that big fib,” Hamner said. “I didn’t mean it that way. Finally, they straightened it out and determined that the flow of water was equal to about three open spillways – an insignificant amount.”

In the meantime, construction workers were still in the water, many hollering for help.

“One man was on a crane boom, and the water kept getting higher and higher,” Hamner said.

He and Grymes drove to the lower end of the lock in a truck and found a boat, but there were no paddles. Hamner and a TVA worker grabbed some planks for makeshift paddles and headed for the man hanging on to the crane and another worker on a drill wagon.

“The water was almost over him,” Hamner said of the man on the wagon. “The current was terrible. Sometime it would turn us completely around because we couldn’t paddle very well with the nail-laden two-by-fours. We didn’t get to him in time. While we were fighting the boat, he disappeared.”

They were able to rescue the man clinging to the crane.

Two men, Harry A. Hines of Killen and man Hamner remembered only as Collier, a pump operator, were on the lower end of the lock watching workers in the trench. Water first gushed through the lower end when the sliding wall was separated from the lower gates.

“They had to go down in the trench and up the rock wall to get up on the floor of the new lock in order to get out of there. All the others had done gone, except the fellow on the crane.”

Collier was climbing to safety when part of the wall collapsed and struck him, Hamner said. The force of the falling concrete knocked him on top of the wall. Hamner said Collier’s injuries included a spike through his arm and body as a result of grabbing some floating debris. He was rescued.

Hines wasn’t as fortunate. He had one leg up on the rock wall when the lock wall collapsed on him.

“The wall behind him caught his leg. That’s the way they found him. It took three weeks to recover the body.”

Hamner had one more battle to fight before the day was



over. Water was flowing in to the lock because the upper gates were open when the break occurred. Hamner, who began work as a lock operator in 1951, knew that any attempt to close the gates could compound the disaster.

He further feared that brakes holding the gates against the lock wall might fail, and the swift water would grab the gates and rip them out of their moorings.

“The superintendent of the power house eventually came over, and the poor fellow was more concerned about wasting water,” Hamner said. “You’ve got about the equivalent of three spillways emptying Wheeler Lake and he wanted to stop that.”

Hamner said the power house superintendent apparently thought the gates could be closed, and the water would stop flowing.

“He said, ‘Hamner close those gates,’ and he started to step around me. ‘I said, ‘I can’t do that Mr. Burcham. If I release the brake on them, they’re gone.’

“He started to step around me, and I slammed the door shut. It automatically locked, and I wouldn’t give it up.”

Hamner said the miter cell might have been lost had the gates been closed.

As it was, three days later, workers were able to install a needle dam to halt the flow of water, allowing the upper gates to be safely



closed.

Hamner said the softness of the rock at Wheeler was demonstrated by the effects of three days of water pouring over the miter cell.

“There was a 15-foot hole where it hit the base of the lock,” he said.



Water streams through the lock the morning following the accident at Wheeler Dam. Photos were taken by the late Paul Shannon of Killen, inventor and amateur photographer.

Haunting memories

Jack Peck carried fellow workers up hill to safety

By BOB STANSELL

Pier Post editor

Jack Peck and Henry Hines had planned a fishing trip for Saturday, June 3, 1961.

The two friends and co-workers at Wheeler Dam never kept that appointment. The collapse of Wheeler Lock on the evening of June 2, 1961, took the life of Hines. Although Peck escaped, the events of that night of terror haunted him for years to come.

Peck, 64, who lives in the Antioch community of Lauderdale County, Ala., recently recalled the night that the dam broke.

“That evening when we went in to work, the general foreman during the safety meeting said he was concerned about the amount of water coming beneath the old lock into the area under construction.

“‘Fellows, I want you keep your eyes on this lock,’ the foreman said. ‘The water’s rising every time they make a locking.’”

Peck said the pumps in the coffer dam were not able to keep up with the inflow where crews were drilling.

Peck and another worker, Lonnie Fuqua of Leighton, Ala., were working in a trench being built alongside the old lock. They were among the farthest away from safety when the wall gave way.

“I went over to get a drink of water,” Peck said. “I turned the cup up and could see the top of lock shaking.”

Peck shook his head trying to clear what he thought was faulty vision. But there was nothing wrong with his sight, and he quickly realized the lock was moving – in his direction.



Staff photo
Jack Peck looks at a newspaper clipping telling about fellow worker John Bennett's efforts to get compensation from TVA.

“I hollered at Lonnie and started running. Lonnie just followed me. He didn't know why he was running.”

Others were soon in pursuit trying to outrun a wall of water that broke through the severed wall.

“Lonnie and I were working on a place to pour concrete, and we were farther up into the lock than anybody. I don't know how we got out. He'd pass me and I'd pass him. The truth is, we outran it.

Their retreat was hampered by an eight-foot ditch, which Peck said he jumped about half-way across and headed for a set of steps on the bank.

“Both of us were pretty upset, but I tried to hold my cool because I knew a bunch of folks were going to be hurt.”

Worker John Bennett was tending the pumps that emptied water from the coffer dam into the river. He was among the more seriously injured, and one of five workers that Peck carried or assisted up 145 steps to safety.

“I saw Bennett being pulled downstream by the current. I hollered and hollered trying to get his attention. I waded out, but I knew there was an eight-foot drop off. I told him to grab a nearby crosstie, and he did. It so happened – I don't know why – but the current washed him close enough that I could wade out and get him.

“Another worker, Roy Quinn, got bunged up pretty good, but Bennett was hurt the worst.”

While Peck was attempting to rescue Bennett, a worker who had claimed a boom to escape the rising water began shouting.

“Jack,” the man on the boom shouted. “There's a man

right under you.”

“Of course, I couldn’t see directly below me, but I could hear him hollering. If I could have gotten to him, I would have saved him.”

The man was later identified as Coy Lineberry of Route 2, Clifton, Tenn. He was a member of the crew of the towboat *Stanton K. Smith* and was headed to the lock to bring another crewman on board when the wall collapsed.

“I carried five of them boys up the hill,” Peck said. “I toted John Bennett and Roy Quinn up the hill on my back. The first aid station was on the other side of the dam, and everybody was going down the road to where the old mixer was. I didn’t have anything else to do but load them in the back of my truck and carry them.

“I told John (Bennett), ‘sit right here while I go get my truck.’ Of course he was out of it, but I ran and got my truck and backed it up to him. In the meantime, two more fellows came walking up, and I took them to get help. When I got back, there were two more needing help. I told the woman at the first aid station, ‘why do they keep going to the mixer? The hurt men are at the parking lot.’

“What tore me up was all those people hollering and screaming,” Peck said. “Roy Burks climbed an eight-inch pipe up a bluff and went over the top to safety.”

The events of June 2, 1961, haunted Peck for more than a year.

“I had a nervous breakdown over it,” Peck said. “It took me quite a while before I could go back down there.”

Peck said the night of the collapse, the general foreman wanted him and others to go back down in the lock and open a trash gate with hopes of relieving some of the pressure.

“I said ‘no sir, fellow.’ I’m not going back down there. I got out once, and I’m not going back.”

Peck said other workers refused to re-enter the area.

“We didn’t know what was going on. The whole dam was vibrating because of the water rushing through the old lock.”

The next day Peck returned, and his assignment was to watch the area where the barge hand had disappeared. Three days later the body surfaced, Peck said.

Peck then worked the pumps emptying the construction area of water.

“I wanted to do it,” he said. “But it just got to me.”

Peck also lost his neighbor and friend Henry Hines. Part of the falling wall trapped Hines by his boot and he

drowned.

“He was helping John Bennett,” Peck said. “He had his boot laced up tight and he couldn’t get his foot out. We were going to go fishing the next day.”

Peck’s uncle Horace Hamner was a lock operator and was on duty that night. Peck said he was relieved to see his uncle alive about 30 minutes after the accident.

Peck worked at the dam for another year, but he avoided the lock.

“I went back up there once or twice,” he said. “I thought about quitting, but my doctor, A.A. Jackson, in Florence told me that if I didn’t go back in there, I’d never be worth a dime.”

Peck eventually overcame his fears and today is able to visit the lock without any problems although it’s an emotional

experience when he recalls the events.

With the lock out of commission, NASA had to consider alternatives to shipping its Saturn rocket for the moon mission from Huntsville to Cape Canaveral, Fla.

A road was built on the south side, to circumvent the dam. Workers were told NASA would make a dry run around the dam before the Saturn rocket followed.

The space agency, in a bit of cold-war coyness, actually sent the rocket through on what was labeled as a test run, Peck said.

Peck worked at Wheeler for another two years, and he was haunted by the events of June 2. When he was told he was being laid off, Peck replied, “I’m glad of it.”

Peck went on to work at Reynolds, first on construction then later in maintenance. 

“I hollered at Lonnie and started running. Lonnie just followed me. He didn’t know why he was running.”

– Jack Peck



**Pickwick Patio
& Leisure Furnishings**
Fabulous Fun Furniture

Just arrived: Strawbelstone Stainless Grills. It may be the last grill you will ever have to buy. Visit our store across from YMCA Lane at 11310 Hwy. 57, Pickwick, Tenn.

*Open Tue.-Sat.
10:00.-5:30
(731) 689-3580*