This Lao man boy was fishing one day in the summer of 1971. He accidentally set off what villagers thought to be an 'air-dropped mine.' Unlike others, this boy survived.
### BOMB TONNAGE BY THEATER

(Thousands of tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>South Vietnam</th>
<th>North Vietnam</th>
<th>Northern Laos</th>
<th>HCM Trail</th>
<th>Cambodia</th>
<th>Yearly Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>218</td>
<td>63</td>
<td>10</td>
<td>23</td>
<td></td>
<td>314</td>
</tr>
<tr>
<td>1966</td>
<td>302</td>
<td>136</td>
<td>11</td>
<td>63</td>
<td></td>
<td>512</td>
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<tr>
<td>1967</td>
<td>598</td>
<td>226</td>
<td>19</td>
<td>91</td>
<td></td>
<td>934</td>
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<tr>
<td>1968</td>
<td>1059</td>
<td>180</td>
<td>222</td>
<td>171</td>
<td></td>
<td>1432</td>
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<tr>
<td>1969</td>
<td>957</td>
<td>0</td>
<td>189</td>
<td>240</td>
<td></td>
<td>1386</td>
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<tr>
<td>1970</td>
<td>511</td>
<td>3</td>
<td>128</td>
<td>266</td>
<td>67</td>
<td>975</td>
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<td>1971</td>
<td>238</td>
<td>6</td>
<td>115</td>
<td>296</td>
<td>109</td>
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<tr>
<td>Theaters totals</td>
<td>3883</td>
<td>614</td>
<td>494</td>
<td>1150</td>
<td>176</td>
<td>6317</td>
</tr>
</tbody>
</table>

A Comparison

Bomb tonnage dropped in all of World War II in Europe, Africa and Asia—approximately 2,000 thousand tons.

Source: The Air War in Indochina
called a pineapple bomb embedded in the mud outside of a Laojian village.
"In one case there was a guy in the Plain of Jars area who was crawling away after they'd hit a village with 500 pounders. So they dropped a 250 pounder on him. That blew off one leg.

"He was still moving, so two planes went in and dropped anti-personnel bombs and they got that one guy crawling away. The pilots were very proud of it; that they'd got this one guy.

"I saw photos of one hospital that was bombed. It was in a cave. They used missiles and then CBU's (anti-personnel bombs). They said it was a command post hospital..."

Former Air Force Sergeant James Walkley  
Washington Post  February 19, 1972
"The picture of the world's greatest superpower killing or seriously injuring 1000 non-combatants a week, while trying to pound a tiny backward nation into submission on an issue whose merits are hotly disputed, is not a pretty one.

Robert McNamara
U.S. Secretary of Defense, 1967
Pentagon Papers

"It is essential--however badly SEA may go over the next 2-4 years--that the US emerge as a 'good doctor'. We must have kept promises, been tough, taken risks, gotten bloodied, and hurt the enemy very badly."

U.S. Assistant Secretary of Defense
John McNaughton, 1965.
Pentagon Papers

"Villages, even in a freedrop zone, would be restricted from bombing."

U.S. Air Attache to Laos,
 Colonel Robert Tyrell
Symington Hearings, October 1969.

"97% of the people [from 96 different villages] said they had seen a bombing attack. About one third had seen bombing as early as 1964, and a great majority had seen attacks frequently or many times... 96% of the 169 persons who responded to the question said their villages had been bombed; 75% said their homes had been damaged by bombing...

United States Information Service Survey
"Following the bombing halt over North Vietnam in November 1968, the U.S. increased its air activity against Laos dramatically, taking advantage of the sudden increase in planes available."

Cornell University Air War Study

"The overriding consideration that governs us at this hour is the chance and the opportunity that we might have to save human lives on both sides of the conflict."

President Lyndon Johnson, October 31, 1968 in announcing the total bombing halt over North Vietnam.

By 1968 the intensity of the bombings was such that no organized life was possible in the villages. The villagers moved to the outskirts and then deeper and deeper into the forest as the bombing reached its peak in 1969 when jet planes came daily and destroyed all stationary structures. Nothing was left standing. The villagers lived in trenches and holes or in caves. They only farmed at night. All of the informants, without any exception, had his village completely destroyed. In the last phase, bombings were aimed at the systematic destruction of the material basis of the civilian society."


"We made a big thing in the Johnson administration about stopping the North Vietnam air strikes. But at the same time we were increasing in secret the air strikes against Laos. In fact as the general just said, which I knew, orders were that if you do not need the planes against Vietnam, use said planes against Laos."

Senator Stuart Symington
Symington Hearings, October 1969.

U.S. State Department Cable to U.S. Ambassadors in Australia, New Zealand, Thailand, the Phillipines, South Korea and Laos, March 30, 1968.

"In view of weather limitations, bombing north of the 20th parallel will in any event be limited at least for the next four weeks of so--which we tentatively envisage as a maximum testing period in any event. Hence we are not giving up anything really serious in this time frame. Moreover, air power now used north of the 20th can probably be used in Laos (where no policy change is planned) and in SVN."
Napalm’s Daddy
31 Years Later

By Nicholas Lemann

In early January of 1942, in the Gill Laboratory building at Harvard, Louis F. Fieser, Emery Professor of Organic Chemistry Emeritus, perfected a jelled incendiary for military use and gave it the name napalm.

Thirty years later, in June 1972, Fieser wrote a letter to President Nixon about the way the United States was using his invention in Indochina. “It seems to me desirable,” he wrote, “to try to promote an international agreement to outlaw further use of napalm or napalm-type munitions.”

Fieser received a reply the next month from Edward E. David, Jr., Nixon’s science advisor. David wrote that the uses of napalm by the U.S. army in Indochina were “difficult to predict or control,” but assured Fieser that “your suggestion will be given very careful attention.”

If I got the brush-off from Nixon,” Fieser says. But he still doesn’t regret having invented napalm; the United States’s use of it to burn people, rather than buildings, is what bothers him. “When we were developing napalm,” he says, “we never thought of any anti-personnel use. We were thinking in terms of wooden structures, factories.”

Fieser first began working on developing new weapons for the U.S. military in late 1940; more than a year before Japan bombed Pearl Harbor. He was 40 at the time and one of a group of young professors—organized in part by President Emeritus James Bryant Conant ’14, a chemist like Fieser—asked by the government to work in secret on weaponry. The government, Conant and all the professors involved took for granted that the United States’s eventual entry into the war was inevitable.

Fieser’s first assigned project was an experiment with new natural explosives. He hired three assistants and was ready to begin work when the whole project was reorganized and he was switched to poison gases.

“Now I didn’t like the idea of poison gases,” Fieser says, “but I swallowed my pride and took the assignment.” However, during a delay in the work while new safety hoods were being installed in the Harvard labs to protect the scientists from the gases, Fieser got interested in incendiaries.

Incendiaries are solids, liquids or gels that burn well; they are designed to start fires that will destroy buildings. In the early 40s, the United States had only one incendiary, called thermite, and it was generally conceded to be ineffective.

Fieser talked to his superiors about incendiaries, and they agreed to take him off of poison gases. He immediately went to work, experimenting with various jelled fuels.

He would test his jelled compounds by burning them inside a wood frame, and then measuring the weight of the frame after the incendiary had burned out. The lighter the wood was, the more effective the jell.

A recipe for napalm? “You just take gasoline, sprinkle in some powder, and stir.”

Fieser got quite proficient at making napalm. “It’s quite simple,” he said. “You just take gas, sprinkle in some powder, and stir. First it turns into a mixture the consistency of applesauce, and then you let it sit a while and it turns into a thick, tough gel.” He pulled a vial of napalm from one of his office shelves; it looks like dried yellow glue. Fieser said that although it was made 30 years ago it would still burn now.

He also invented several kinds of napalm bombs, including a celluloid case filled with napalm and equipped with a time fuse, for use by espionage agents; a tiny, cylindrical napalm bomb with a time fuse, designed to be attached to bats who might nest in enemy installations; and the “Harvard candle”, a napalm bomb which could be ignited by a match head attached to its top.

After the war ended, Fieser went back to teaching here. He never worked for the government again. And the army continued to use napalm.

Fieser was aware of the continuing use of his invention, but he didn’t become really outraged about it until June 1972, when he read in the Boston Herald Traveler that a napalm accident in Vietnam had killed or maimed 20 civilians and soldiers. He realized that U.S. soldiers were using napalm as an antipersonnel weapon, not just to burn down buildings. He had never suspected that napalm could be useful to the United States because of the way it clung to people’s skin while it burned. A week after he read the article, he wrote Nixon.

It is unlikely that any weapon development will go on at Harvard any time in the near future, since there is now a University-wide ban on classified government research.

But Fieser is not, despite the abuses of his invention, opposed to professors working on weaponry during wartime.

“I discovered that a jelled fuel burns more efficiently than a free fuel,” he says. “I don’t think I have to be ashamed of having made that discovery. And I would be the first to suggest that antipersonnel use be outlawed. But how in the world do you make the distinction? Why should the investigator be called on to rule on the uses?”
Phomachan and Chantadon

Nang Khampounta, the mother of these children, described how the children's father, Thit Boun Thong, was killed by "big bombs" from a T-28 aircraft in August 1969.

"Thit Boun Thong had been working in the ricefield and did not reach the holes in time when the planes came over. He was killed. There were no soldiers around when the planes bombed.

"I can't remember how many times the planes came over in a day because when they came over I was very frightened. Every time I heard the sound of a plane I fled for the holes."
"We were just starting to flee to this side in December 1968 when the planes dropped bombs on us. We had just come out of our holes. There were no Pathet Lao or Vietnamese soldiers around. There were many people together, but only two, my sister Sao Nohng and my cousin Xieng Boua Phan, were killed."

Thao Boudi also related how in 1969 when again he was trying to flee to RLG controlled areas, a group of Vietnamese soldiers captured and shot his father and cousin. "A group of twelve (Vietnamese) soldiers caught them and shot them. There were seven of us together but they only caught these two. It was very dangerous when we were coming to this side. If the planes saw us they would shoot us. If the Vietnamese saw us they would capture us."
Thao Phom, Ban Muang.

Thao Phom described how he was wounded by an anti-personnel bomb on August 12, 1969, while he was coming back from the upland rice field to his house. A bomb had been dropped by a jet earlier. He hid in a hole when the bomb exploded. He was treated in a local hospital but still can't work when we were with the Pathet Lao. The T-28's jets were very dangerous... If they were villagers or soldiers... They would bomb them. Every day they would bomb three, four, or even five times.