

- 0. K19 Widowmaker Story Preface
- 1. NUCLEAR ENERGY
- 2. HOW NUCLEAR ENERGY WORKS
- 3. NUCLEAR SUBMARINES
- 4. THE K-19
- 5. A NUCLEAR ACCIDENT
- 6. AVOIDING NUCLEAR MELTDOWN
- 7. RADIATION SICKNESS ABOARD a NUCLEAR SUB
- 8. SAVING THE K-19 CREW
- 9. SECRET HEROES



K19 Widowmaker

Photograph of the Russian Submarine K-19. Image online, courtesy dynamicscience.com/au website.

It seems that what really determines the choices a man makes in critical, life-threatening situations is still his inner conviction, his sense of responsibility for the events around him, his personal conscience.

> Nikolai Zateyev Commander of the Soviet Submarine *K-19*

The 4th of July, 1961, was supposed to be a triumph for the crew of the Soviet Union's first nuclear-powered, ballistic-missile submarine. *K-19*, not yet dubbed "Hiroshima" by her crew, was under the command of Captain First Rank Nikolai Vladimirovich Zateyev.

Finished with naval exercises in the North Atlantic, *K-19* was returning home from her first patrol voyage for the Soviet Northern Fleet.Unknown by Zateyev (who is the basis for the character "Captain Alexei Vostrikov" in the film), *K-19* had three potentially fatal strikes against her on that summer day.

The ship, a "Hotel 1" class (Project 658) submarine, had a design flaw in her steam plant. Moreover, the ship's power source, two <u>liquid metal</u> nuclear <u>reactors</u>, had <u>no emergency</u> backup system to prevent reactor overheating in the event of a malfunction. And there was something else neither the captain nor his crew knew. A welder had failed to follow safety procedures when he installed the reactor's primary cooling loop pipelines.

As *K-19* made her way in the Norwegian Sea, not far from the island of <u>Jan Mayen</u>, the submarine's early morning routine was disrupted by the screeching of an alarm. The worst possible event was unfolding: Reactor Number Two had experienced a sharp drop in pressure in its <u>cooling</u> loop.

Unless clear thinking and courageous action intervened, the reactor's core (including its nuclear fuel) could meltdown. And if THAT happened, a nuclear <u>explosion</u> would likely follow.

See Alignments to State and Common Core standards for this story online at: <u>http://www.awesomestories.com/asset/AcademicAlignment/K19-Widowmaker</u>

See Learning Tasks for this story online at:

http://www.awesomestories.com/asset/AcademicActivities/K19-Widowmaker

Media Stream



k19 The Widowmaker Movie Poster

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