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The Treaty of Space had ended the world world that he and his kind had wrested from night. He didn't fit into the new bureau enforced by the High Space Mandate. Neither friends. It was true that nothing important Obania for twenty years -- not since the war

But a slow brown smile softened old Jim's space-burned face, and the old eager light came to his eyes. He took up the pencil again, fingers that seemed too big for a pencil. to the machines he planned to build.

A sense of urgency drove him on. The task was vast for any man, and his time was running out. Once he had hoped that Rick would come back to help -- for Rick was big enough for any task. But Rick had taken a job with Interplanet. The task was left for old Jim Drake, and he had no time to waste.

After four decades of effort, he was used to scornful voices. His dream was mighty enough to make any man a giant, and he was too big to mind a little laughter. He had even patiently accepted a nickname first used in mockery. He let men call him Seetee Drake.

For seetee, to the engineer's mind of old Jim Drake, meant power. Terror to others, to him it was atomic energy, priceless and illimitable. The whole meteor belt was rich in contraterrene drift; matter inside out, with electrons and positrons in reverse positions. It was the dangerous debris of that terrific cataclysm, before the time of man, when the strange stellar wanderer of contraterrene matter shattered a trans-Martian planet. When it touched common matter, the



## COLLISION ORBIT

By Will Stewart

Image at top right courtesy of the MIT Science Fiction Society. The illustration originally appeared in *Astounding Science Fiction*. Copyright (c) 1942 by Street and Smith Publications, Inc., reprinted by permission of Dell Magazines.

**As the winter of 1941 began,** Jack Williamson sat in a small unpainted cabin he had built on his family's New Mexico ranch, pounding out a story on a secondhand Remington portable typewriter. The story, "Collision Orbit" appeared under the pen name Will Stewart in *Astounding Science Fiction* magazine in July 1942. It was among the first science fiction stories to explore contraterrene matter, today better known as antimatter.

The action takes place on an asteroid, where engineer Jim Drake sets out to harness the immense energy contained in contraterrene meteors—called CT or "seetee." (In the 1940s, scientists had not yet ruled out the existence of meteors made of antimatter; see accompanying essay.) To avoid annihilation, Drake conceives a system of magnets that can capture antimatter without touching it.

"Terror to others, to him it was atomic energy, priceless and illimitable," Williamson wrote on this page of his manuscript, a carbon copy whose cheap paper has browned with age.

Though later science fiction, such as *Star Trek*, often features antimatter, there are no clusters of it known in the real universe. The propulsion of spaceships by antimatter remains science fiction.

**William S. Higgins, Fermilab**