WITNESSING A NUCLEAR EXPLOSION

By Tom Kelley '63

In July of 1962, USS Kitty Hawk, CVA-63, of which I was a crewmember, was on a Mid-Pac cruise "shaking-down" after an extended repair period at San Francisco. At that time, Operation Dominic, a series of high-altitude nuclear weapons tests, was being conducted at Johnston Island. This specific test was named "Starfish Prime".

At the appointed hour (midnight, local time) on July 9, 1962, the device was exploded. This was to be at an altitude of 250 miles. My recollection is that Kitty Hawk was one thousand "slant range" miles away from the blast.

The bow of the ship was pointed towards the explosion site, and the "countdown" was broadcast over the ship's 1MC. We were advised to not look at the blast at the actual detonation time. We should turn our back, and look only after a number of seconds had passed.

No problem. As the time approached, it was my intention to follow the recommended procedure, and to turn away at, say, the three second point. Well, the explosion occurred at (approximately) five seconds remaining on the countdown. The "state-of-the-art" of relaying communications, at that time was, perhaps, not quite as advanced as it is today. Our time information had, apparently, been delayed while being "processed" through a number of paths.

Well, upon detonation, the sky was lit from horizon to horizon to a brightness equaling noontime. I recall thinking that one could read a newspaper in that light. This phenomenon persisted for five minutes. (Please understand that this occurred fifty-two years ago, and I can do no better as to what I saw than what I state here.) After the initial brightness, the characteristic mushroom cloud shape was able to be perceived; its color red and orange, and then changing to white. The total length of time of visibility of the blast was fifteen minutes, as I remember.