

ProtoMatter

Overview and The Banning Question.

Shivak, Vulcan Science Academy Review Vol. XXXI No. 5, Page 35.

ProtoMatter has been at the center of controversy for over twenty standard years. As it was originally developed, ProtoMatter was a cultured biological element used supposedly for the bio-computer interfacing with the Duotronic Elements of the Daystrom 500J series. It was developed by the Hanson Project on Stardate 2/1203.23 after fifteen hard years of research into the issue of a biological element interface.

When originally designed ProtoMatter was seen as the technological breakthrough of the century. It was a chemical that could be genetically manipulated and grown to meet any standardized program created by the Daystrom 500J. Thus an effective biological computer could be built using this substance and this system could even grow on itself for repair work and expansion. Indeed, if ProtoMatter had not been flawed it would have provided a breakthrough that could only be compared with that of the invention of Warp Drive.

But the Hanson Project staff had not fully tested the substance over an extended period of time. After their initial report to the Federation Science Council many fears were brought up by members that thought that the ProtoMatter substance might be unstable over an extended length of time. Most of these questions were ignored by the Hanson staff since they were eager to begin full production of the substance. Even as late as 2/1302.15 the doubts of the stability of the project were published by several scientists on the Council. In the Federation Science Review, Vol XXVIII No. 8, questions were posed as to whether ProtoMatter could be trusted as a true bio-genetic substance or whether it was a temporary interfacing material suspect to unknown variations in stability. At the time, a series of tests were being run at the Vulcan Science Academy (Rayburn Staff, Project 10089-2J) at the growth rate of samples of ProtoMatter provided by the Hanson Project.

The samples of the ProtoMatter given by the Hanson Pro-



ject team for study proved that as a biological substance, the ProtoMatter seemed to grow not at a steady rate as produced in their original report, but at a very unstable rate. At times very fast and other times regressing totally. This lack of uniformity seemed to cause some fears as the scientists at StarFleet Command were looking to use the substance as a potential element in a weapon (The KyBri Project declassified Stardate 2/2101.01).

Several warnings arose concerning the use of ProtoMatter. On 2/1312.2 a very large sample of the substance shipped from the Hanson Project's main laboratory in the Saur system seemed to grow at such a rate that the container that it was in ruptured in flight. The scientific research vessel *Amsterdam* was contained the mess but several of the crewmembers were exposed to the raw free-floating ProtoMatter. It seemed to react with the germs within their systems and soon many members of the crew found themselves stricken with serious illnesses. By the time the *Amsterdam* arrived at Vulcan, eight men had died and over thirty were seriously ill.

When confronted by the Federation Science Council, Dr. Randolph Hanson claimed that the sample was mishandled and possibly contaminated by the crew of the *Amsterdam* while in flight. When pressed with the issue that the ProtoMatter's instability could be the cause, Dr. Hanson rejected the idea as did most of his staff. The handling of the material was proved to be done poorly by the *Amsterdam* and thus the excuse was blamed to them.

Other incidents seemed to arise pointing to the instability question. At the Vulcan Science Academy, several much smaller samples of the substance either died or grew out of control for no reason at all. Several researchers including doctors Tamer and Shivistal requested more research into the formulation of the ProtoMatter, but their requests came far too late to prevent the disaster at the Hanson Project's main base in the Saur System.

StarFleet Command requested some preliminary research into a photon-type torpedo system using the ProtoMatter as part of the targeting computer. The elements as used seemed to work fine on three test runs. On the fourth test however something went wrong and the small R-1 research station was badly damaged during the experiment. Forty-three personnel lost their lives, including Dr. Hanson, the project coordinator.

Several of the survivors came forward and confessed that the ProtoMatter Matrix was defective in design. ProtoMatter was unstable due to unknown influences and reacted in erratic behavior. Dr. Hanson and the leading team members hoped that during their weapons testing that a means might be found to extend the longevity of the ProtoMatter, making it more stable. Instead, they risked innocent lives.

The Federation Science Council met in emergency session once these issues were brought to life. By a majority vote ProtoMatter was banned for use and for scientific research on any Federation funded facility. Several independent firms sought to try research on the substance but could not afford to do so without Federation funding. The ban was placed in effect on 2/1403.22.

The issue of ProtoMatter was thought to be done and buried for many years until the recent Genesis Incident. From the preliminary results, Dr. David Marcus used elements of ProtoMatter in the construction of the Genesis Torpedo. These traces of ProtoMatter had been carefully designed and constructed to interface the computer programming system of the device. Thus as a biological link it could provide complexity of programming otherwise not useable by the staff.

The Federation Science Council launched an immediate investigation into the Genesis Project once it was discovered that ProtoMatter may have been involved. It was determined that none of the other survivors of the Genesis Team had any knowledge that the young Dr. Marcus had indeed contaminated his aspect of the project with the ProtoMatter Matrix.

From the preliminary reports filed by the former crew of the *USS Enterprise* upon their arrival at the planet Vulcan, it appears that Dr. Marcus knew of the ProtoMatter's potential dangers, yet used it since the substance could be manipulated to fit the needs of the Genesis programming. When the device was experimented on in the Genesis Cave on Regula One, the initial reaction was that the ProtoMatter was stable enough in the small amount used in the experiment. Recent visits to the site indicate that the cave also is deteriorating at a greatly expanded rate due to the ProtoMatter Matrix.

The accidental explosion of the Genesis Torpedo in the Mutura Nebula proved to be the greatest disaster to date involving the use of ProtoMatter. A much larger amount of the substance would have been required to complete the programming of the Genesis Torpedo than the small amount used in the cave on Regula One. This larger amount became unstable much faster, even after the device was reconfigured after detonation. The basis of the ProtoMatter in the Genesis Matrix broke the entire system apart, destroying the Genesis Planet and creating an intergalactic incident.

As of Stardate 2/2201.08, the Federation Science Council is considering a sentence to be placed on all scientists using or possessing ProtoMatter and having the substance banned from all production research, whether funded by the Federation or privately. The cost in lives of the elements, as well as its potential dangers implicate it as one of the most deadly substances invented in the past 50 years.

