

DIRECTIVE ENFORCEMENT DEPARTMENT

STATUS: DECLASSIFIED YC117/04/24 EXECUTIVE ORDER - 94209348/664017-A

THIRD PARTY MEDICAL ANALYSIS REPORT 6608491108

All data within this report is strictly confidential and limited to authorized recipients only. Anslo Tetua, Mizhir Starsurge, Kybernetes

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Postmortem Examination Of The Body Of Male 'Drifter' Case # NESB-001-Autopsy

A postmortem examination of the body of a 'Drifter' male of unknown age. The examination is conducted by:

Dr. Mizhir Starsurge (Matari Exodus)
Dr. Anslo Tetua (Scope Works)
Kybernetes Moros (Achura-Waschi Exchange)
Kalo Askold (Sanguis Septum)

ATTENDANCE:

While typically assistants are brought in to facilitate examination, the sensitive nature of this autopsy was deemed justification to dismiss assistants of their duties for this case.

CLOTHING:

Subject does not have clothing in the traditional sense. See Exosuit review section for more.

DEEP SCAN:

A deep scan of the body is performed. Results returned somewhat inconclusive as the exosuit seemingly blocked scans so that a complete 'picture' could not be painted for us.

IDENTIFICATION TAGS:

N/A.

EXTERNAL EXAMINATION:

The body is that of a typical Drifter male, 150 pounds and 70 inches, whose appearance does not provide insight to his age. The body is cold. However, rigor mortis is NOT present. Livor mortis is also NOT present.

The scalp is hairless. The irides are black. The sclerae and a black/grey. The nose and ears are unusual, assumed so due to genetic engineering. The teeth are natural and in good repair. The tongue appears normal.

The neck is heavily implanted. See below analysis for details.

IDENTIFYING MARKS:

N/A

EVIDENCE OF MEDICAL INTERVENTION:

The very existence of this entity is a testament to medical intervention. Implants are heavily present throughout the body. See below analysis for more.

EVIDENCE OF INJURY:

Burn wounds consistent with explosion within a vessel, body recovered from wreckage mostly intact:

Burns: Burns present along the length of subject's right face. Burning surprisingly minimal compared to expected burns from vessel destruction.

INTERNAL EXAMINATION:

| Organ System | Analysis | Hypothesis |
|----------------|--|---|
| Cardiovascular | Heart The heart muscle appears to have been atrophied and what appear to be ancillary pump units have been installed to maintain a sufficient cardiac output. It is still possible to produce a small pump output upon electrical stimulation as some of the muscle cells appear to still be alive. Tissue analysis of the heart muscles show little to no difference compared to normal heart tissue. The ancillary pump units are clearly synthetic. Vascular Like the heart there are only minor changes to the vascular system. However, there are a few modifications that integrate some of the cybernetic structures to the cardiovascular system. Upon tissue analysis there was found nanofiber structures that appears to be reinforcing the blood vessels. Lab work on the make and composition of this reinforcing structure returned | The fluid dynamics have most likely not been under large changes. Whether the purpose of the reinforcing structures of the heart and vessels is to compensate for atrophy or improve the capability is still unknown as it hasn't been possible to measure the function. However the higher viscosity suggest a need for higher cardiac output. The interesting part is definitely the blood composition. It appears to be much more sophisticated compared to the Jovian blood sample. While some genetic modification markers typical of Jove are present in both samples, additional items present in the Drifter blood sample, and the content of both nanobots and synthetic substances is staggering. The function of these elements are still a mystery. A further analysis must be done. The lack of leukocytes is a shocking discovery. Without just one of the leukocyte types the human body will be |

inconclusive. Majority of minor veins and arteries have been either replaced or reinforced by this material especially in the periphery.

Hematology

It was clear to see that the blood composition is heavily modified. The blood itself has a gray colour with slightly higher viscosity than typical human blood. Hematology report provides a possible explanation for colour and viscosity difference, due to high concentration of nanobots in subject's 'blood.' The platelets and leukocytes (white blood cells) are completely missing while erythrocytes appear normal. Labwork detected traces of unknown isotope or readings that may be low level radiation as if blood is laced with a known energy source's byproducts.

Lymphatic system

Lymph nodes have shrunk due to the lack of leukocytes. Besides that no apparent changes.

Spleen

Has been completely replaced by a synthetic organ with similar size and form.

extremely vulnerable to infections and other harmful substances. With all of them gone there are no possible way for a body to survive unless there is complete isolation.

A small test was conducted where different bacterias and viruses, but also fungi and animal cells, were exposed to drifter blood. The results showed an extremely efficient antibiotic effect suggesting that some of the elements in the drifter blood has replaced the immune system. (Dr. Starsurge's note: This could potentially be used for medical purpose however it is likely that the drifter blood will cause substantial damage in pure form).

A coagulation test was set up and it appears that the blood has retained the ability of forming a clot despite the lack of platelets. An additional test was set up with a sample that has been exposed to a high electromagnetic impulse and the clotting ability has greatly diminished. This suggests that the nanites play a role in blood clotting.

The spleen normally serves as a reservoir and filtering system for the blood in a normal human body. The function of the drifter spleen has not yet been assessed but it is likely that it has been replaced in order to function with the new blood composition and most likely plays a major role in that. Further analysis is required.

Pulmonary

Lungs

No changes visible on macro scale. The shape, size and colour is all nominal. Tissue analysis shows minor amounts of necrosis in the alveolar tissue. Synthetic tissue appears to have replaced some of the dead tissue. The capillaries in the lungs have a high content of nanofiber materials.

The pulmonary system appears to be remarkable similar to the normal human pulmonary system, but there are damages on micro scale which they have attempted to repair with synthetic tissue. It has not been possible to test the assumed respiratory function for efficiency due to subject death.

Pulmonary tract

The Vocal cord is absent and no signs of biomechanic replacement has been found. The structure of the larynx has been slightly modified to compensate for this. Aside from that there are no changes to the pulmonary tract.

Like the remaining vascular system the pulmonary capillaries have been reinforced.

While being complete inference based on what we see with the corpse, the lack of vocal cords is an interesting find and strongly suggests that the drifters are being controlled by another entity that doesn't want them to speak.

Digestive

Digestive tract

Initial analysis of digestive tract reveals a fully intact system capable of normal human digestive functions. Patchwork present throughout body's other systems present as well. This systems anomaly resides in the stomach of the subject. The digestive tract appears mostly empty with no digestive fluids are present. In addition, a bile like substance is present throughout the entire digestive system, unlike the human digestive system where different stages have different composition of digestive fluids. Tissue analysis shows nanite integration.

Liver and biliary system

The liver itself appear normal but several biomechanical systems are located on the surface. Many of these have nanotubes that are connected to the liver tissue on cellular level that cannot be seen visually without the aid of extremely advanced microscope systems.

A small, seemingly artificial, organ located between the liver and gallbladder has been inserted in the biliary system. Aside from that there seem no changes to it.

Analysis of the bile shows a different composition of the metabolic substances and a low amount of nanobots.

The findings of the digestive tract suggests a low activity. However it does still appear functional. A possible hypothesis could be that their digestive system only serves as a secondary energy source with the ability shift between active and inactive states. However it is not known how effective the absorption of nutrition is. The primary energy source is still unidentified.

The implantations on the liver and the additional organ in the biliary system suggests a modified metabolism. This could further enhance the theory of an alternative energy source. On the other hand the degree of cybernetic modification would still have required a different metabolism.

The synthetic pancreas can simply be the result of the pancreas being digested by the pancreatic enzymes due to inactivity in the digestive system.

Pancreas

The pancreas has been replaced by a synthetic pancreas. The composition of the excretion contains synthetic enzymes.

Nervous

Central Nervous System

Lab work on recovered neural tissue inconclusive. Hypothesized cause attributed to implants extensively integrated with neural tissue using a methodology unknown to us. Tissue sample contained no signs of necrosis despite extremely minimal trace byproducts of necrotic processes being detected. Frontal lobe seemingly intact but heavily integrated with implant technology throughout subject's cranium. See below table (Implant Analysis) for further details.

Peripheral Nervous System

The PNS shows high amount of damage. Cybernetics has been used to compensate, but the innervation of skin and muscle tissue appears lacking especially in the extremities.

Eyes

The eyes are fully cybernetic. The left eye has been cut open and studied and there have been found some similarities to known cybernetic eyes. The right one has been sent to a specialist for further analysis.

Ears

No changes to the hearing sense has been discovered. The vestibular system appears to have been supplemented with a gyroscope based system.

The amount of cybernetics in the brain is staggering. Dr. Tetua made following statement during the autopsy: It's like the brain is more implant than tissue, as if the tissue is just sort of there for a few things, but it's not the focus. The old saying of 'would you like some tea with your sugar' comes to mind.

No normal human being should be able to survive with such an extensive alterations of the brain. Even if the drifter cybernetics are better integrated in the neural tissue than our technology it is safe to say that the consciousness is heavily affected by this in one way or another.

The attempt to compensate for the degeneration of PNS is low which suggest that the function of the extremities has a low priority.

The vision and the proprioception appears to have been augmented. The hearing sense, however, has not been modified suggesting a low significance of the hearing sense.

| Motor | Sartorius, Rectus Femoris, and Gastrocnemius Samples contain traces of necrosis byproducts similar to neural tissue sample. Samples do not exhibit any other signs of necrosis. | Muscle atrophy repair is clearly the intent for a majority of these implants and augmentations. However, the extent of the repairs, combined with the exosuit the Drifter wears, alludes to more than mere muscle repair. |
|--------------|---|---|
| | It should be noted that byproduct levels are slightly higher than that found in neural tissue. Extensive integration of biomechanical tendon substitution is present throughout the body. Substitute contains trace elements of Si, Dy, and Nd, along with numerous unidentified elements. Substitute also contains trace levels of unidentified radiation, the same found in the 'blood'. Substitute and original tissue in the body contain distributed micro electrical nodes. Purpose unknown. Pectoral, Deltoid, Triceps, and Biceps Atrophy and necrosis byproducts appear in less concentrations in these areas. Augmentation by unknown materials mentioned above also less present. Equal percentage of unknown energy nodes present throughout muscle tissue. | 4.5 |
| Urinary | No modification to the urinary system has been found. The blood supply appear lower than normal and there is only a little amount of urine present in the bladder. | Like the digestive system it is likely that the urinary system only plays a minor role. |
| Reproductive | Full male reproductive organ present. No alive sperm detected | No interesting discoveries found here. It is unlikely that they reproduce through conventional mean. |

Summary: The body of the drifter has higher degree of modification than the research team have ever encountered. The abnormal high amount of implants in the CNS, the mysterious blood composition and the inactivity of the digestive system suggests that the physiology has been undergone substantial changes. Modern cybernetics has been developed to fit the human biology but in the case of drifters it appears that their biology has been adjusted to fit their cybernetics. Many of the preliminary analysis of the synthetic organs show little compatibility with basic human biology. However in depth analysis of them are still needed to confirm this. Some of it has even proven to be harmful when exposed to human cells.

Furthermore, a comparative analysis between Jove tissue samples (Blood, Bone Fragment, Epidermis Sliver, Liver Bile) and what samples were obtained from the corpse provided a fairly conclusive result. While some genetic markers between the Drifter and Jove are a match, there is simply too much differentiation between the Jove and the Drifters. They are not the same beings in any sense of the word.

MECHANICAL EXAMINATION

| Mechanical Analysis | | |
|---------------------|----------|------------|
| Item in Question | Analysis | Hypothesis |

Exosuit Direct connection between the The combination of cerebellar integration with the presence of the sockets would Drifters' exosuits and the mechanical analogue to the suggest the suit assists the subject in cerebellum is immediately interfacing with one or more devices. obvious on visual inspection. Calling on the resemblance of the sockets Spinal sockets superficially similar to capsuleers' own spinal modifications and to the capsule control interface the role of the cerebellum in motor control, are also present, but in a natural hypothesis to form would be that diminished quantity compared to the suit is a component in the subject's known specifications: there are ship interface, relaying information from four sockets rather than five. the infomorph to the vessel (and conversely)—not unlike the capsules with which were are more familiar. Compositionally, the suit is broadly similar to the other visible Given the Drifters' involvement with the implantation. Noteworthy are the Sleepers and the latter's well-known actuators distributed throughout affinity for virtual reality, it could be that the suit ranging from the these sockets also play a part in connecting nanoscale upwards; similarly, a to one or provide some of the biofeedback more pliant polymer has been necessary to maintain stasis. This is an used for large portions of the idea drawn only from broad associations, hands and fingers, which would however; nothing in the analysis suggests seem to cause minimal loss of it directly. fine motor control. With the suit apparently inactive following the death of the subject's body, the mechanical implications of the actuators can only be speculated upon. They would certainly assist the subject's motion on foot, and the special consideration given to the hands' design implies that this was not entirely disregarded as a possibility: the subject would spend at least some time 'standing alone' without any physical connection to other devices. Jaw Implants All Drifters visible thus far display Working from the apparent physical at least partial mandibular similarities between the Drifters and the replacement, following the 'mainstream' Directorate Jove, the initial

consideration was that these implants were

to repair damage arising from an imperfect

reconstruction of the body.

jawline upwards on towards both

zygomatic bones and from there

onwards to the temples.

Preliminary compositional studies of samples that were recoverable from the subject reveal no significant difference in the constituents of these implants to those seen elsewhere on the Drifters.

Computational power is conspicuous by its absence; these components have apparently been introduced for a purely structural or mechanical purpose.

Meditating on the ubiquity and uniformity of the mandibular replacement across the Drifters observed to date, however, suggested a deeper purpose to them and lead to this hypothesis being discarded; simple reconstruction of naturally or accidentally damaged areas would lead to some variation between one Drifter and another.

It is possible that these implants allow for some greater or modified control of the jaw and mouth, but this is purely speculative; no reason for such alteration is obvious.

Perhaps more viable as an explanation is that the implantation process for the rest of the subject's head was greatly simplified by severe damage to (or total removal of) the mandible. Such would notably ease access to deeper structures in the brain and go a good way towards accounting for the consistency of these implants across all observed Drifters.

IMPLANT ANALYSIS

| Implant Analysis | | |
|------------------|----------|------------|
| Section | Analysis | Hypothesis |

Truncus Encephali (Brainstem)

Brainstem overall appears fully intact and healthy. While minor traces of necrotic byproducts are found in the samples, the appearance of the brainstem is extremely healthy. Upon further analysis after opening a section of the stem, a series of artificial tissue running along the length of the stem can be found at the center. Lab work returned inconclusive. Currently attempting to develop alternate testing methods.

As previously mentioned, any change to the brainstem will create physiological change. However, what these changes entail cannot currently be ascertained given the complexity of the subjects biology against our standard battery of tests.

Dienchephalon (Interbrain)

The interbrain contains implants of an extremely different nature to those found throughout the subject corpse. These implants appear to be of an older design and look far more artificial than other implants. Review of previous reports published during initial investigations within Sleeper structures point to the implant in subject interbrain to be of entirely Sleeper origin. Functions are similar to those found in Mercenary Clone Soldiers, as well as further, more complex/advanced abilities we have not yet identified.

The true functionality of the Sleeper implants was not fully understood before the Drifter corpse was obtained, and it still isn't now. However, despite all the implantations and augmentations within the body, the Sleeper implants and the surrounding tissue and connections remain untouched. Reason, unknown.

Cerebellum

As previously hypothesized, the cerebellum has been completely replaced by a biomechanical implant. Further information pending tests.

This is an implant unlike anything we've seen before. It maintains the appearance of something artificial and smooth, but is seemingly organic to the touch. Implant appears covered in an extremely thin layer of web-like nano-fiber. Attempts to retrieve samples have proved difficult. At the time of this report a small sample of the implant proper was retrieved from between the nanofiber web. Test results will be included in this report later as an addendum.

| Occipital lobe | Much like the cerebellum, the sections of the lobe within the skull exhibit contradictory attributes upon first glance. An appearance of near absolute artificial nature, while being organic to the touch. The webbing is also present on the lobe. However, the section of the lobe exposed to the outside world is covered in an extremely thin yet extremely durable casing. | There is a unique amount of web like nanofiber connections between the occipital, cerebellum, and parietal lobes that is not present elsewhere in the brain of the Drifter. While this suggests a need for more direct connection between these sections for ease of processing, this cannot be confirmed or denied without further testing. |
|----------------|--|--|
| Parietal lobe | Lobe appears intact save for one implant visible as a subdermal protrusion on the head. Further inspection reveals a seemingly artificial implant set on top of the parietal lobe, apparently rooted into it by an unknown mechanism. Additional wiring and nanotube | As with the other implants, we are unable to determine at this time whether it interacts specifically to enhance or modify visuospatial perception, ability to calculate, etc. Further testing will be required. As a side note, there are some theories that the parietal lobe contains the very essence of |
| | systems connect this implant to the remaining implants of the subject. | human consciousness. While not consistently quantifiable in a number of publications, the possibility of this implant interacting with what may be the door into an infomorph should be investigated. |
| Temporal lobe | Two implants with the same features (artificial feel, organic appearance) are set into either side of the subjects temples. Implant appears connected to numerous thin implants along subject cheeks and jaw. Purpose unknown. | The implant does not seem to penetrate deeply within subject neural tissue. However, the possibility of micro connections exists and will be explored in further detail in a secondary analysis. Until analysis is complete, a conclusion cannot be drawn regarding the express function of the implant neurologically (i.e. memory augmentation/suppression). However, given the lack of vocal cords in the Drifter, it is safe to rule out any hypothesis regarding speech control (despite the Drifters mouth being able to open as well as key muscles being interacted with by the cheek implants). |

| | | *See Mechanical Analysis for further hypothesis regarding functions. |
|----------------|--|--|
| Frontal lobe | While previously thought unimplanted due to lack of augmentation signs present throughout the rest of the body, further analysis proved otherwise. The lobe, while mostly intact, is covered in the same nanofiber weave present in other sections of the brain. All fibers connect to different implants in varying degrees of fiber density. | The frontal lobe is associated with such things as planning, motivation, attention, etc. This section's augmentations are light in comparison to the remaining, heavily altered parts of the brain. These fibers must play a role in information processing and retrieval. But why use this instead of standard paths? |
| | Within the frontal lobe are additional invasive fibers in the forum of strings connecting from the frontal lobe through to all other lobes, interconnecting them. | |
| Thoracic Spine | T2->T5 vertebra linked via biomechanical implant to subject exosuit. While implant link appears fully organic to the touch, all attempts to open the implant for further analysis were unsuccessful. Attempts to obtain sample for lab | The link is almost like a black umbilical cord connecting the vertebra to the entry points in the Drifters exosuit. The entry point on the skin for the link is completely fused with the implant. Without accessing the link internally, we cannot determine what its purpose is. However, it is safe to say that it plays a critical |
| | work also unsuccessful. Further research required. | role in Drifter physiology considering how integrated it is with the body. |

Summary: While our initial hypothesis of Drifters being mere shells under the control of a foreign infomorph seems partially supported by the analysis of the Drifters corpse and implants, we cannot in good faith say it is supported in a formal capacity. While these implants and replacements interact with, or act for, specific brain functions we know about in humans, we cannot confirm that their lobes do what our lobes do. The majority of sample lab work returned inconclusive. Furthermore, the methods of connection, interaction, and information processing are almost totally alien to what we have encountered before. The only familiarity we have to use and draw hypothesis from are the location of these implants relative to lobe locations in the human brain and how they function, and even that could be incorrect to how Drifter minds actually function. It could be said that, because Drifters are similar physiologically to the Jove (though they are not Jove), and that Jove are a form of human, their lobes must function the way ours do. However, it is uninformed inference to draw a conclusion based on mere similarity given just how complex and foreign this thing is.