

## ***TR-3B Questions & Answers - Edgar Fouche***

1. Who is the primary contractor for the TR-3B?

Lockheed, Boeing, Northrup, Teledyne Ryan, managed by NRO, NSA, and CIA. there were a number of major defense contractors involved to keep different parts of the R&D compartmentalized.

2. What was the date of the first flight of the prototype for the TR-3B?

They built a lot of DIFFERENT prototypes from the early 70s on. I believe the first gravity warping vehicle, i.e. Triangle was flown in the early 70s

3. How many different sizes of the TR-3B were built?

Approx 250 feet (prototype) and three were flying before 1994. The operational model was supposed to be 600 feet. Never saw a large production model. Only saw them over Edwards AFB - AFFTC, and Nevada.

4. What military facility are these craft be kept?

Other than Groom, it's probably kept under water, or in the Antarctic. Don't know.

5. What is the overall mission of the TR-3B?

Logistics support and transportation for the secret space command. If used on a planet, moon, or large outpost, you would have a readymade transportable space station.

6. Does the TR-3B carry any weapons system on-board?

I have no knowledge of its weapons systems. But the three letter agencies and the military love adding weapons.

7. How many crew-members are on-board during a typical mission?

I believe it was a minimum of four for the prototype.

8. What type pilots fly the TR-3B? (Air Force or contractor)

Both, but the military pilots are Navy and USAF and graduates of their own Test Pilot School, like at AFFTC - Edwards AFB.

Many astronauts were the top test pilots in our military. The top 1% for sure

9. What type of navigation system is used on the TR-3B?

Advanced in atmosphere nav systems, celestial & star system navigation systems, C3 systems. Of course it would have double or triple communications, navigation, IR, ILS/Tacan, radar, and (ECM ) Electronics Communications Measures, and ECCM systems.

10. What type of flight control system is used on the TR-3B?

Variable vectored intake and thrusters on the edges, and advanced multimode propulsion engines on each tip of the triangle.

11. What is the power source of the craft?

Two nuclear reactors.

12. What materials are used to build the TR-3B?

Advanced composites, metamaterials, and titanium.

13. How many total TR-3B's were built?

Prototype, at least 3. Don't know about the Operational model or the many variations that have come since.

14. Was the TR-3B the same craft that was seen over Belgium in 1989, and Southern Illinois in 2000?

I believe it was the final prototype, or perhaps an earlier R&D - FOT&E model.

15. What is the total cost per each TR-3B?

In 1990 dollars it was about 1 Billion dollars. I assume the operational model would be three or four times that.

16. Does the TR-3B have a payload bay?

Never noticed one. But obviously they have to have different egress and ingress points

17. Has the TR-3B been flown outside of our solar system?

Wouldn't even venture a guess. Why not?

18. How is the TR-3B capable of exceeding the speed of sound without causing a sonic boom?

I believe it's the ionic electrical discharge and warping of gravity that allows that.

19. Please describe what the early prototype looked like when you first saw it in a military hangar? What was the date when you first saw the TR-3B?

1975 high in the atmosphere at night at Edwards AFB.

1976 within the southern part of the Nellis Range.

Late 70s at Groom AB

The schematic you have and my 3d triangle drawings are fairly accurate. I was told that the operational model had different engines on the tips, that they had eliminated the rotatable crew compartment,

20. What is the exterior color of the craft?

It has a stealth electro chromatic coating that can change its color and electronic signature.

21. Please describe the landing gear on the TR-3B?

The only one I saw on the ground used 3 tripods with T pads. No wheels.

22. What government agency is responsible for operating the TR-3B?

NRO, NSA, CIA

23. Was Kelly Johnson the Sr. Project design for the TR-3B?

No it would have been Ben Rich.

24. Does the TR-3B any low frequency electrical “humming” noises during operation?

When we were bike riding in the high desert of the Nellis range, it made a very slight magnetic hum. It also made the hair on our bodies stand up. It was right over our heads, and was pretty much silent.

25. Are there any light on the TR-3B?

Yes, each tip of the Triangle. The MFD on the prototype gave out a large diffused light in the bottom center of it.

26. Does the craft incorporate any type of “visual stealth” technology which wide hide it from view?

Most likely since the electro chromatic coating can change color. Of course we have developed several types of invisibility tech since the Operational model. The one was saw high up in the atmosphere after dark got bigger and bigger as it descended. Also the stars were blocked out above the triangle.

27. What is the purpose of the “vents” on the side?

Variable vectored intake/exhaust depending which direction the vehicle is going.

28. Wouldn't the directional thrust by jet engines on-board the craft be negated by the MFD since they are in close proximity?

The MFD is not antigravity. So I don't see why it would interfere.

## ***MFD***

Sandia and Livermore laboratories developed the reverse engineered MFD technology. The government will go to any lengths to protect this technology. The plasma, mercury based, is pressurized at 250,000 atmospheres at a temperature of 150 degrees Kelvin and accelerated to 50,000 rpm to create a super-conductive plasma with the resulting gravity disruption. The MFD generates a magnetic vortex field, which disrupts or neutralizes the effects of gravity on mass within proximity, by 89 percent. Do not misunderstand. This is not antigravity. Anti-gravity provides a repulsive force that can be used for propulsion. The MFD creates a disruption of the Earth's gravitational field upon the mass within the circular accelerator. The mass of the circular accelerator and all mass within the accelerator, such as the crew capsule, avionics, MFD systems, fuels, crew environmental systems, and the nuclear reactor, are reduced by 89%. This causes the effect of making the vehicle extremely light and able to outperform and outmaneuver any craft yet constructed—except, of course, those UFOs we did not build.

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The TR-3Bs propulsion is provided by 3 multimode thrusters mounted at each bottom corner of the triangular platform. The TR-3 is a sub-Mach 9 vehicle until it reaches altitudes above 120,000 feet—then God knows how fast it can go! The 3 multimode rocket engines mounted under each corner of the craft use hydrogen or methane and oxygen as a propellant. In a liquid oxygen/hydrogen rocket system, 85% of the propellant mass is oxygen. The nuclear thermal rocket engine uses a hydrogen propellant, augmented with oxygen for additional thrust. The reactor heats the liquid hydrogen and injects liquid oxygen in the supersonic nozzle, so that the hydrogen burns concurrently in the liquid oxygen afterburner. The multimode propulsion system can; operate in the atmosphere, with thrust provided by the nuclear reactor, in the upper atmosphere, with hydrogen propulsion, and in orbit, with the combined hydrogen\ oxygen propulsion.

<http://www.darkgovernment.com/news/tr-3b/>

"All those people speculating about how this is "impossible" because of the use of nuclear power are missing the claim that nuclear power is not used for thrust, but for modifying the "mass" of the vehicle, that is assuming the claim is true. So the nuclear power source is only used to supply electricity, by a turbine or thermionic generation, or both, which is then used to electrically accelerate a plasma to relativistic speeds. In principle everything suggested is plausible, although no known materials would allow actually building a toroidal enclosure strong enough to withstand the forces involved before breaking apart... notice I said "Known" materials. who knows what secret/classified materials may exist, and what other missing pieces of the puzzle there could be."

### **Ultracold plasma 2014**

Ultracold plasmas are created in a [magneto-optical trap](#) (MOT) by trapping and cooling neutral [atoms](#), to temperatures of 1 [mK](#) or lower, and then using another [laser](#) to [ionize](#) the atoms by giving each of the outermost electrons just enough energy to escape the electrical attraction of its parent ion.

One advantage of ultracold plasmas are their well characterized and tunable initial conditions, including their size and electron temperature. By adjusting the wavelength of the ionizing laser, the kinetic energy of the liberated electrons can be tuned as low as 0.1 K, a limit set by the frequency bandwidth of the laser pulse. The ions inherit the millikelvin temperatures of the neutral atoms, but are quickly heated through a process known as disorder induced heating (DIH). This type of non-equilibrium ultracold plasma evolves rapidly, and displays many other interesting phenomena.<sup>[35]</sup>

One of the metastable states of a strongly nonideal plasma is [Rydberg matter](#), which forms upon condensation of excited atoms.

### **Impermeable plasma**

Impermeable plasma is a type of thermal plasma which acts like an impermeable solid with respect to gas or cold plasma and can be physically pushed. Interaction of cold gas and thermal plasma was briefly studied by a group led by Hannes Alfvén in 1960s and 1970s for its possible applications in insulation of fusion plasma from the reactor walls.[38] However later it was found that the external magnetic fields in this configuration could induce kink instabilities in the plasma and subsequently lead to an unexpectedly high heat loss to the walls.[39] In 2013, a group of materials scientists reported that they have successfully generated stable impermeable plasma with no magnetic confinement using only an ultrahigh-pressure blanket of cold gas. While spectroscopic data on the characteristics of plasma were claimed to be difficult to obtain due to the high-pressure, the passive effect of plasma on synthesis of different nanostructures clearly suggested the effective confinement. They also showed that upon maintaining the impermeability for a few tens of seconds, screening of ions at the plasma-gas interface could give rise to a strong secondary mode of heating (known as viscous heating) leading to different

kinetics of reactions and formation of complex nanomaterials.[40]

[http://en.wikipedia.org/wiki/Plasma\\_\(physics\)#cite\\_note-11](http://en.wikipedia.org/wiki/Plasma_(physics)#cite_note-11)

## Google: gravity manipulation 2014

Gravitation Manipulation

- Gravitational Fields Manipulation
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## United States gravity control propulsion research - Must read! Ed

American interest in "**gravity control propulsion research**" intensified during the early 1950s. Literature from that period used the terms anti-gravity, anti-gravitation, baricentric, counterbary, electrogravitics (eGrav), G-projects, gravitics, gravity control, and gravity propulsion. <sup>[1][2]</sup> Their publicized goals were to develop and discover [technologies](#) and theories for the manipulation of [gravity](#) or gravity-like fields for propulsion. <sup>[3]</sup> Although [general relativity](#) theory appeared to prohibit [anti-gravity](#) propulsion, several programs were funded to develop it through gravitation research from 1955 to 1974. The names of many [contributors to general relativity](#) and those of the [golden age of general relativity](#) have appeared among documents about the institutions that had served as the theoretical research components of those programs. <sup>[4][5][6]</sup> The existence and 1950s emergence of the gravity control propulsion research have not been a subject of controversy for [aerospace](#) writers, critics, and [conspiracy theory](#) advocates, but their rationale, effectiveness, and longevity have been the objects of contested views.

[http://en.wikipedia.org/wiki/United\\_States\\_gravity\\_control\\_propulsion\\_research](http://en.wikipedia.org/wiki/United_States_gravity_control_propulsion_research)

<https://www.google.com/#q=gravity+manipulation+2014>

Now I've been ridiculed about the plasma being cooled to 150 degrees Kelvin.

Do some searches: ultracold plasma 2014

I don't know the physics of the MFD, but I stand by what I was told. As time goes on, it doesn't seem as ridicules' as it once did. Ed

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## On the ultracold plasma evolution

### *Abstract*

The time evolution of the Coulomb system whose initial total energy is zero is considered. The solution for a system of 2000 particles in the range of 8000 inverse plasma frequencies was obtained by the molecular dynamics method. It is shown that under conditions typical of experiments with ultracold plasma the nonideality parameter of the plasma cannot reach large values due to recombination heating, and the relaxation process itself is not described within the conventional model of three-body recombination. *Original Russian Text © S.A. Maiorov, 2014, published in [Kratkie Soobshcheniya po Fizike](#), 2014, Vol. 41, No. 3, pp. 46–56.*

Close

## On the Ultracold Plasma Evolution

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**Abstract**—The time evolution of the Coulomb system whose initial total energy is zero is considered. The solution for a system of 2000 particles in the range of 8000 inverse plasma frequencies was obtained by the molecular dynamics method. It is shown that under conditions typical of experiments with ultracold plasma the nonideality parameter of the plasma cannot reach large values due to recombination heating, and the relaxation process itself is not described within the conventional model of three-body recombination.

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*Introduction.* In the supercooled (nonideal) classical Coulomb system, recombination is caused by the complex many-body interaction resulting in its abrupt recombination retardation. This recombination rate retardation phenomenon, as many other processes, was studied by the molecular dynamics method in the series of studies in 1986–1996 (see [1–5]). A new state of the Coulomb system in which plasma did not recombine according to the known  $9/2$  law at low temperatures was discovered. This state of the classical Coulomb system was called the metastable supercooled plasma. At that time, no physical object consisting of classical Coulomb particles for which the condition of strong nonideality would be satisfied existed in the nature. Therefore, despite the active discussion (see, e.g., [6–8]), the found plasma state remained at the level of the computational artifact.

However, in 1999, the state of supercooled metastable Coulomb plasma, ten years ago found in a numerical experiment, was obtained during selective ionization of supercooled xenon atoms by a laser [9]. The first publication [9] attracted much interest to properties of the unique physical object called the ultracold plasma (UCP). After that, a series of the studies of the supercooled Coulomb system properties was performed by both the experimentalists and theoreticians [10–16]. Many of the studies rediscovered and confirmed a number of the results obtained 10–20 years ago.

The ultracold neutral system of classical Coulomb particles (plasma bunch in a trap), formed during selective ionization of cold atoms, passes through two stages during relaxation. In the first stage, at an insignificant change in the plasma density, the metastable state is formed, which is characterized by the balance between free electrons and Rydberg atoms. The study of the parameters and kinetic characteristics of such plasma is of fundamental interest due to its high degree of nonideality. In the second evolution stage, the plasma bunch expands into an ambient space, is further supercooled, and, probably, exhibits the plasma phase transition to the crystalline phase. An analysis of the feasibility of such a transition is the most important problem for the nonideal plasma theory; this has long been discussed. The majority of experimental studies is devoted to plasma relaxation exactly during plasma expansion; we will consider plasma relaxation in the first stage which under experimental conditions corresponds to times shorter than  $1 \mu\text{s}$ . At this stage, plasma relaxes without the change in the density, caused by expansion. The main physical process is reaching the quasi-steady state of the system.

*Problem statement and calculation results.* A system of an identical number  $N = 1000$  of oppositely charged particles initially immobile and uniformly distributed within a counting cell, i.e., a cube with edge  $L$  and specularly reflecting walls, is considered. The cube sizes were chosen from the condition  $nL^3 = N$ , where  $n$  is the numerical ion density which was set to  $10^{12} \text{ cm}^{-3}$ . It was assumed that positively charged particles (ions) have elementary charge  $e$  and infinite mass, i.e., they are immobile during the calculation. The electron charge  $e$  and mass  $m$  were chosen according to their real values.



The interaction of particles was set equal to the interaction of mutually permeable uniformly charged spheres of diameter  $a = 0.05n^{1/3}$ . At the ion density of  $10^{12} \text{ cm}^{-3}$ , for such spheres, the potential well depth is  $I = 48e^2n^{1/3} = 802 \text{ K}$  and the characteristic electron energy is  $e^2/r_{WS} = 27 \text{ K}$ ; at the ion density of  $10^9 \text{ cm}^{-3}$ , the potential well depth is  $I = 80.2 \text{ K}$  and the characteristic electron energy is  $e^2/r_{WS} = 2.7 \text{ K}$ .

The system characteristics were calculated depending on the parameter  $an^{1/3} = 0.01 - 0.1$  defining the relative potential well depth. The dependence of the characteristics of the system with zero total energy on the potential well depth appears rather strong. However, proper attention is not paid to this factor in many studies, since long-term and high-accuracy calculations are required to reveal this effect.

The described physical system of  $2N$  Coulomb particles is characterized only by the mass, charge, particle density and diameter. As a length unit, we choose the Wigner–Seitz sphere radius for particles of the same type,  $r_{WS} = (3/4\pi n)^{1/3}$ ; as a time unit, we take the inverse plasma frequency  $\tau_0 = \omega_{\text{plasma}}^{-1}$ , where  $\omega_{\text{plasma}} = (4\pi e^2/m)^{1/2}$ , and we normalize all energy values to the energy of the interaction of two particles with the elementary charge on the Wigner–Seitz radius  $e^2/r_{WS}$ .

The chosen physical system is a microcanonical ensemble, its dimensionless average characteristics depend only on the number of particles in the system and the potential well depth in dimensionless units  $an^{1/3}$ . Surely, the region shape has a certain effect; however, as calculations show, the difference, e.g., between the cube and sphere at the same number of particles in them, leads to the difference in average characteristics by the value much smaller than 1%. The average characteristics of electrons are determined by time averaging, i.e., the equality of averages over the ensemble and time is assumed (the system ergodicity hypothesis).

The dependence of the system characteristics on the number of particles is often discussed; however, attention is usually paid to only one aspect, i.e., the sufficiency of the number of particles to achieve desirable statistical validity. In this context, the procedure of multiply repeated calculations with a small number of particles and different initial conditions is sometimes used.

However, the effect of the boundary on the system characteristics can be rather considerable in this case.

As a simple example, let us consider the effect of the number of particles  $N$  on the average distance between the particle and its nearest neighbor for a system of particles randomly arranged within a cube. We set the average distance from the electron to the nearest ion as

$$\langle r_{ab} \rangle = \frac{1}{N} \sum_{k=1}^N |r_k - r_{kb}|, \quad (1)$$

where  $r_k$  is the radius vector of the chosen electron and  $r_{kb}$  is the radius vector of the nearest ion; the summation is over all electrons in the system. We note that the average distance from an electron to the nearest ion depends only on the ion density and is independent of the electron density.

Figure 1(a) shows the dependence of the average distance from an electron to the nearest ion on the number of ions within the cube with edge  $L$ , calculated by the Monte Carlo method and normalized to the Wigner–Seitz sphere radius  $r_{WS} = (3/4\pi n)^{1/3} \approx 0.62/n^{1/3}$ .

The same figure shows the approximation

$$\langle r_{ab} \rangle = r_{WS} \Gamma(4/3) [1 - 3r_{\text{max}}/2N^{1/3}]^{-1/3} \quad (2)$$

obtained for the reason of the consideration of the effect of a decrease in the effective density around particles arranged near the surface. To estimate the surface layer thickness, the most probable distance to the nearest particle was used, and it was assumed that the effective particle density in the surface layer is two times lower. The average distances between nearest neighbors in the graphs are normalized, as is conventional in most studies of ultracold plasma, to the Wigner–Seitz sphere radius.

In the uncorrelated infinite system of particles with a given numerical density, the probability that the nearest particle is in a given distance interval  $(r, r + \Delta r)$  is written as

$$P(r)\Delta r = 4\pi r^2 \exp(-r^3/r_{WS}^3)\Delta r. \quad (3)$$

