

# **Sky Gazing for Aliens**

#### Why in news?

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- US government recently declassified information about "Advanced Aerospace Threat Identification Program" (AATI).
- This has revived long subdued interests in Unidentified Flying Objects (UFO) and Alien life-forms.

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#### What is AATI program?

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- Humanity has always been fascinated by the possibility of extraterrestrial life through unverified word-of-mouth spotting of aliens.  $\n$
- Most governments have largely been diligent in suppressing all evidences that could possibly fuel such speculative thoughts.  $\n$

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- But the recent declassification of information about the AATI program and videos related to it has given good impetus for rejuvenated interest in aliens.  $\n$
- AATI was an investigative program into UFOs, that was operational between 2007 and 2012, which had documented various suspected alien movement.  $\n$
- Notably, a retired military officer who headed AATI has also come on record, stressing the need to continue investigating UFOs.  $\n$

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## How has conspiracy theories fared?

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- Unsubstantiated conspiracy theorists are currently apleantly and overwhelmingly support the existence of aliens and their visit to the Earth.  $\n$
- UFOs got significant attention for the  $1^{\rm st}$  time during the 2nd world war, when many military pilots reported sighting of saucer shaped objects.  $\n$
- Subsequently, the number of such claims increased and came from all sorts of people even alien abduction theories were flouted.  $\n$
- Notably, "Area 51" a remote part of the Nevada desert in the US, that houses an Air Force base, is a darling for conspiracy mongers due to its secretiveness.

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 Most conspiracy theorists believe that the Air Base is actually a cover-up for a facility to research into aliens that have either – died on Earth, been captured alive, or have come as ambassadors.

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### What were some government initiated programs?

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- During the Cold War era, air forces worldwide were on an eternally alert mode for the fare of possible missile attacks.
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- The alertness provided for ample sighting of flying objects, most of which were eventually identified but some does remain as yet unidentified.  $\n$
- While the western governents were more worried about Russians than about alien life, they nevertheless initiatited investigations on UFOs  $\n$
- Notable, US Air Force initiated "Project Blue Book" which began UFO investigations in 1947 and reviewed over 12,000 sightings till 1969.  $\n$
- While most sightings were concluded as stars, oddly-shaped clouds other terrestrial objects, about 701 of them remain unexplained.  $\n$

- Similarly, Britain convened the "Flying Saucer Working Party", which also investigated UFOs and arrived at conclusions akin to the US project.  $\n$ 

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### What are some significant scientific works in this field?

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- The famous astronomer Frank Drake through his "Drake Equation" guesses that there could be considerable number of alien civilisations.  $\n$
- In 1961, he listed the variables for determining the number of alien civilisations capable of using radio signals in the Milky Way Galaxy.  $\n$
- Drake estimated the: n

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- $\circ\,$  rate of formation of suitable stars  $_{n}$
- $\circ$  number of such stars with planets in orbit  $\n$
- $\circ\,$  possible number of inhabitable planets  $_{\n}$

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• He postulated that life might exist or emerge in future in a small fraction of such inhabitable planets.

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• Further, he stressed that the possibility of emergence of intelligent civilisations capable of radio communication was an even smaller fraction of those plantes.

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• While his was essentially a guess work by extrapolation of data, advancements in telescopes has helped considerably to improvise space research.

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 Notably, a large number of exo-planets perceivably condusive for life has been spotted to be orbiting stars but we're still guessing about the other variables.

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### What are the speculations?

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- Considering the vastness of the cosmos, alien life is indeed very much possible and it might even be humanoid and carbon-based.  $\n$
- As thousands of exo-planets have already been identified by Kepler Space Observatory, Earth-like conditions may exist in some of these.  $\n$
- Notably, comets have been found to possess amino acids, that are key for the evolution carbon based life forms.  $\n$
- However, people like Nobel winning physist Enrico Fermi has been critical of such hypothesis, as there is no conclusive proof of their existence.  $\n$
- While there is a possibility that aliens don't exist, there is also a possibility that they've not developed intelligence or that they're consciously lying low.  $\n$
- Also, considering the interstellar distances, if a civilisation 1000 light years away had discovered radio waves at the time we did, then their first signal would reach us around 3000 AD.

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## Source: Business Standard

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