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Ancient World of Aerospace Technology: Technical Note

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Abstract: *As per the great ancient Indian scripts over thousands of years back there are flying and levitating vehicles called as vimanas (e.g.: Pushpaka Vimana) with most efficient propulsion system (e.g.: mercury propulsion) and far more advanced than today's technology which are even capable of travel from one planet to another planet. But even now also no one knows about manufacturing those Indian ancient vimanas.*

Key words: *Aerospace, Ancient, Classification, History*.

1. INTRODUCTION

The word Vimana is originated from the Sanskrit words vi-mana where Vi means bird and Mana means like which conveys the meaning 'bird like'. According to ancients scripts like Vedas Vimana means flying palace or flying chariots used by Hindu gods to travel, even to other planets e.g.: pushapaka , rukhma etc.. From ancient Hindu architecture Vimana means pyramidical tower above the Garbhagudi of Hindu temple. There are so many types of vimanas, as per vimana sastra the primary vimanas like Rukhma, Tripura, Sundara , Shakuna and Pushpaka.

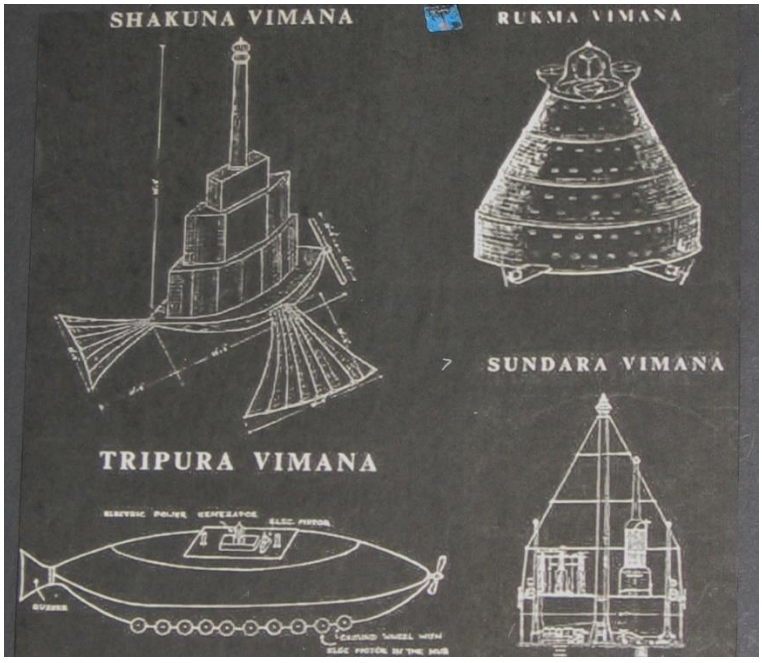

FIGURE 1. Sketch presentation about different vimana

1. M.Sai Dheeraj et.al (2014) researched about the ancient aircraft called Pushpaka vimana mentioned in Ramayana and anti-gravity neutralisation method used to make Vimana levitate [1].
2. Ankana Ghosh Dastidar et.al (2022) investigated about the ancient technologies of India which includes vimanas and compared them with latest technology [2].

3. Sruthi.K.R et.al(2018) investigated about levitating and space vehicles mentioned in vedas and many other texts across the world and compared with modern vehicles [3].
4. M.Prashanth Reddy et.al (2020) researched and experimented on the nozzle of Rukma Vimana by building it with new manufacturing processes [4].
5. Shivanandam M. et.al (2015) researched about the different types of propulsion systems used in Vedic vimanas which are not available in latest technology [5].

2. AN OVERVIEW OF ANCIENT VIMANAS

Valmiki in his Ramayana mentioned about vimanas in Ayodhya Kanda 27-8, 15-49,17-18, 88-5, in Aranya kanda 32-15, 35-19, 42-19, 48-6, 50-11, in kiskindha kanda 50-30, 51-5, in Sundara kanda 7-7, 8-1, 8-2, 5, 8, 9-19, 11, 11-34, 12-14, 25. Rig veda also having the content of Vehicles such as: Jalayan (Rig Veda 6.58.3)- a vehicle that can travel in both air and water. Kaara kaara kaara (Rig veda 9.14.1)- the vehicle can be operated on ground and in water. Tritala Triatal Tritala (Rig veda 3.14.1)- Trichakra Ratna (Rig veda 4.36.1)- a three wheeled vehicle which can travel in air. Vayu Ratha (Rig veda 5.41.6)- a wind powered vehicle. Vidyut Ratna (Rig veda 3.14.1)- a vehicle powered by electromagnetic power. From Agastya Samhita we can find 2 types of flying objets first one called Agniyana- almost like a air balloon(chchatra) filled with hydrogen also there is a clear explanation about the extracting hydrogen from water with electricity which we called as electrolysis process now-a-days and using that hydrogen as fuel and moving forward generally this vehicle is designed to escape and the second one is Vimanadvigunam. And few more are there in other sources, by taking few models as examples such as Pushpaka , rukma etc and finding the possibilities and scientific reason behind their performance and comparing them with latest aircrafts in terms of efficiency , abilities. Vimana shastra written by maharshi Bharadwaj we can find various methods of building a Vimana.

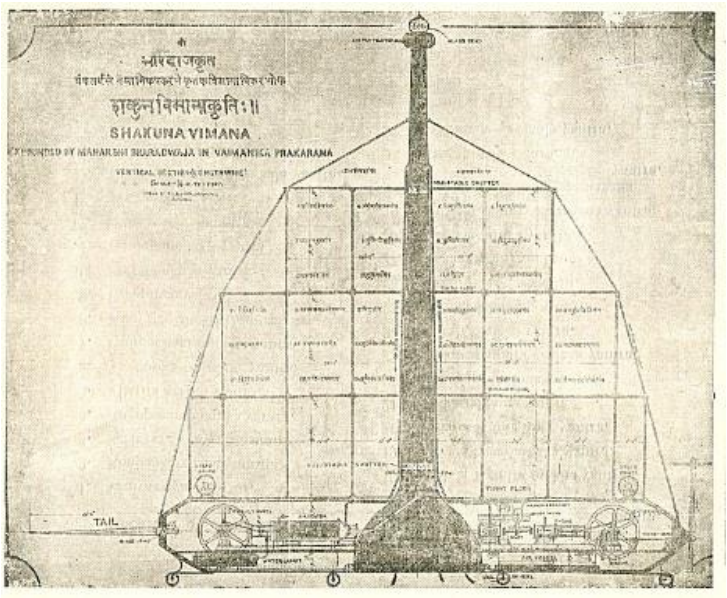

FIGURE 2. Ancient image of vimana

According to Vimala Shastra The vimanas are classified into 3 types 1) maantrika, 2) taantrika and 3) Kritaka as per yugas In maantrika 25 types of of vimanas, in taantrika 56 types of vimanas are there and in Kruthaka mainly 4 types of vimanas are there those are shakuna,sundara,rukma and tripura.

3. MECHANISM AND CONTROL SURFACES

Most of the vimanas are not having wings so current techniques like using primary and secondary control surfaces are not possible in between Shakuna vimana is having wings and elevator and Tripura having rudder still for Shakuna vimana there is no traces of primary control surfaces on wings. Whereas Rukhma and Sundara are pyramidical shape vehicles with VTOL capability. For all the Vimanas maneuverability is still a challenge Rukhma vimana is having engines to produce lift from bottom and extra propellors on sides for movement in different directions same like gyro-copter Tripura which is capable to travel in water, land and air (hovercraft) is having tractor engine and rudder at back so technically movement is possible.

Sundara is also like Rukhma but extra engines or propellors in sides are not there but thrust vectoring can make movement. Shakuna is more look like a bird carrying a 4 floors pyramid and tractor engine.

4. HOW WORLD IS USING RECENT TECHNOLOGY RATHER THAN THE ANCIENT AVIATION TECHNOLOGY?

1. China found some old texts in Lhasa city which is in Sanskrit language they send that to Chandigarh university and department of Sanskrit announced that texts consisted the information about how to build an interstellar spaceship.
2. The mercury ion thruster technology used by Nasa is mentioned already in ancient texts.
3. There is a claim that Shivar Bapuji Talpade invented machine which is heavier than air and can fly in air in 1895 that means 8 years before the wright brothers, it flew at 1500ft height for 18 minutes with the help of mercury propulsion system, he builds that machine with the help of Vimanika sastra which was translated into usable Sanskrit by Subbarayan Shastri from the actual text which was Witten by Maharshi Bharadwaj 12000 years back.
4. Dandibhatla Viswanatha Shastry helped Hitler by decoding how to store missile safely and v8 rocket bomb pulse jet engine from Yajurveda, etc.

5. CONCLUSION

So as per ancient Vedas and texts there are so many techniques for which we are not able to find the answers today. So, we shouldn't think like we are the ones who have created all the facilities what are experiencing today. They have already done it earlier and we have to decode them to get further improvement of the technology. The main reason why the secrets of these books are still not available to humans is because the person who is having technical knowledge not having the clear knowledge on Sanskrit to decode and vice versa.

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