

## Finding Their Way to the Stars

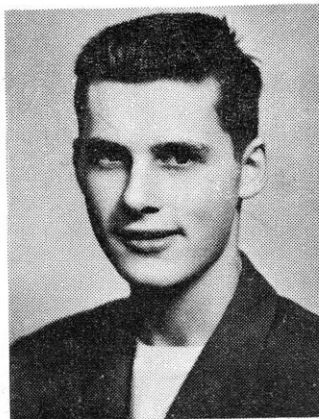
by Barrie Moen (VHS 1969)

The 1950s were an exciting time in the world of physics and astronomy. Following World War II, a “cold war” developed between the Soviet Bloc and the USA and its allies. Subsequent efforts to dominate the skies developed into a competition that was soon dubbed the Space Race. Which country would be first to launch a satellite, put a man into space, or land a man on the moon became fixations of both politicians and the general citizenry. Visions of exploring outer space swept up the interest of young people all over the globe. Barry Turner from the VHS class of 1954 was one such young man.

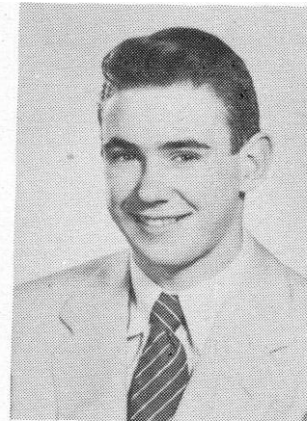


"Look, it's quite simple. It isn't rocket science you know... Er... Well, you know what I mean!"

Barry Turner was born in Victoria in 1935, moved to Halifax with his family during the early portion of WW2, and returned to Victoria in 1942. He attended Sir James Douglas Elementary School and Central Junior High, before graduating from VHS. He demonstrated exceptional math skills at an early age and excelled at physics during his years at Vic High. His childhood neighbour and Fairfield friend was Stewart Smith (VHS 1955), who became an internationally acclaimed particle physicist. One can only imagine the conversations that took place during milk and cookie breaks in their homes.



**Barry Turner - VHS 1954**



**Stewart Smith - VHS 1955**

*Photos courtesy of Victoria High School Archives*

Barry graduated from UBC in 1959 with a BSc in honours Physics, and completed his masters degree in Solid State Physics in 1962. He met and married Margaret-Anne Goulay in 1961. Following the completion of his degree they moved to Ottawa where Barry worked for the National Research Council. In Ottawa he published many research papers on Solid State Physics. Always keen on Astronomy, he accepted a position at the University of California at Berkeley in 1964, eventually obtaining his PhD in 1967. Barry then accepted a research position with the National Radio Astronomy Organization based on the campus of the University of Virginia in Charlottesville, which remained his home for the rest of his career.



***Radio Telescope***

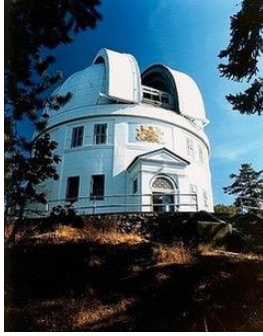
Dr. Turner gained an international reputation over the course of his career, publishing over 200 scientific papers covering such diverse subjects as the existence and structure of very high-density molecular gases that comprise many of the molecules that are found in life on our planet. He served on a number of committees designing and aiding the operation of radio telescopes throughout the world, while attending international meetings to present his scientific research. He was also a very accomplished pianist and supporter of classical music. He died from Parkinson's disease in 2008.



***Clayton Uyeda***

In recent years Vic High science teachers Clayton Uyeda and Jon Geehan introduced the idea of an Astronomy 11 course in part to honour the memory and work of Barry Turner. In the spring of 2017, Astronomy 11 was approved as a four-credit elective course and subsequently an Astronomy Club was formed. Free from the restrictions of regular school hours, the club allows for stargazing activities in the evenings.

The majority of the Astronomy 11 students are members of the Astronomy Club. At this point there are 21 students involved. Students have the opportunity to work with the NRC's Herzberg Institute of Astrophysics at the Dominion Astrophysical Observatory, and the dome at the University of Victoria.



### ***Dominion Astrophysical Observatory***

The club's activities include star parties. The inaugural star party -- very much a trial experiment -- was successful despite two unwelcome sideshows. It was almost impossible to allow for the unexpected presence of marijuana-smoking homeless people encroaching on the stargazing students or a dispute that led to an unscheduled fistfight.



### ***Vic High Star Party***

The silver lining in these two unfortunate circumstances was the impetus for Vic High's administration finding a safer viewing platform above the Lawrie Wallace Auditorium. The local business community also got involved. The owners of Pluto's Restaurant were impressed by the students' astrophysical photographs and offered the walls of their establishment as a photo gallery for the students. The club has access to six telescopes that have been donated by the public. Star parties are now an integral part of the Fernwood Community's activities.



### ***Jon Geehan***

Vic High's Astronomy 111 course certainly has its supporters in the scientific community, including Reg Dunkley (VHS 1968) who is Vice President of the Victoria Astrophysical Society.



***Reg Dunkley***

As Mr. Dunkley put it: “Such a program would illustrate to students the power of evidence based, scientific methodology to help expand their understanding of the Universe. Any course employing Mathematics and Physics to explain and predict its motion and behaviour is extremely important. Using telescopes to observe, and the latest technology to capture astro-photographs, students would be able to savour the beauty and mystery of the night sky. It would certainly offer the fortunate students, who are accepted into the course, an opportunity to understand and appreciate the dynamic marvel that is the planet Earth.”

After wishing the creation of an Astronomy course every success, Mr. Dunkley finished by saying, “This course will foster scientific literacy and deserves to be at the very core of an academic program.”

The affable Mr. Dunkley sent a photo of a fully steerable radio telescope in Green Bank, West Virginia, which became the subject of international attention when environmental protestors began launching flying squirrels with little transmitters attached to their heads to foul up the receivers on the mammoth telescope. Readers will have to make their own decision about which is worse, says Mr. Dunkley, “squirrels in the scope, or bats in the belfry.” One can be assured that even Dr. Turner would get a chuckle out of that. The squirrels couldn’t be reached for comment.



***Radio Telescope in Green Bank, West Virginia***

Thanks to the efforts of Clayton Uyeda and Jon Geehan, the memory of Vic High’s internationally acclaimed astrophysicist Dr. Barry Turner will continue to be honoured by the existence of an Astronomy 11 course and its associated club. Vic High students are well placed for an opportunity to find their way into the stars.



*Photo of M31 (Andromeda Galaxy) by Jon Geehan*



***Barrie Moen, VHS 1969***  
*(see Barrie Moen on Facebook)*