In the fall of 1937 a group of 16 MIT undergraduates in cooperation with the Technology Museum committee, chaired by Arthur C. Watson outlined plans for the Hobby Shop. The main objective was to assemble a shop in which the maximum number of crafts, such as work in wood, metal, glass, radio and photography could be pursued. The plan was not only to encourage existing hobbies, but, as Vannevar Bush expressed it, to “encourage the development of new hobbies.”

Dr. Bush ‘16 then vice president of MIT secured a small 16’ x 22’ room in the basement of building 2 and in February of 1938 the Hobby Shop was born. Equipment from many departments was donated and the original members set about the task of laying out the shop, setting up the machines, refinishing benches and building cabinets and drawers for tools. This quote is from the history written in 1939 by the founders. “The group went out in search of materials which might be salvaged for the shop. This was in keeping with the spirit of cooperation which is characteristic of the shop members --- each one tries to contribute to the shop’s improvement.” This spirit continues today.

In the early years until 1946 the Hobby Shop was advised and heavily influenced by Arthur Watson the chair of the Technology Museum committee and leader of the Museum movement at MIT. The Technology Museum project made displays for the halls in the main building of MIT. These recessed displays contained dioramas of manufacturing processes such as factories for making ceramics and glass, models of inventions like Alexander Graham Bells first phone and also mathematics models. Many of these models were built by Shop members. You can still see these display cases in the halls today and there are some topological models outside the math department offices on the first floor of building 2 that just may have been made in the Hobby Shop, back in 1939.
Members also worked on their own projects like a radio amplifier, a model steam engine, a loom and even a diving helmet. The Shop operated on a cooperative basis with members taking on improvement projects as they saw the need. The founding students realizing that they would soon leave MIT still wanted the Hobby Shop to continue and to keep improving. In order to perpetuate the Hobby Shop and continue this spirit of voluntary service, a three tiered membership system was set up. The “master craftsmen” a small group of dedicated senior members formed the shop governing body. The “journeymen” were the majority of members and apprentices, the students who had just joined. Open houses (called smokers) were held each year and interested students were asked to join. As “apprentices” the new members were required to learn the Shop rules and do 6 hours of work for the shop. After completing that they were voted on for membership by the master craftsman and became journeymen. Journey men were allowed in the Shop whenever it was officially open, while master craftsmen could use the Shop anytime so long as there were two. When a master craftsman left MIT a replacement was voted in by those masters remaining.

The Hobby Shop space and equipment grew in the early years with the encouragement and support of Dr. Bush and Dean Burdell. Members were interested in the latest technology and in photography in particular. Strobe lights based on Prof. Harold “Doc” Edgerton’s designs were built and used for high speed photography. Photo contests were held each year with judging by “Doc” and others. Other examples of experimental photo techniques that were worked on include stereo projections to create 3 dimensional effects and very early color printing.

Two Shop stories from the 1940s still hold some mystery for me. In 1941-2, under the direction of Watson, a scale model of the Solomon Islands was made using plaster of paris. The accuracy of this model including the curvature of the earth was much admired. These islands were considered key in the defense of Australia in WW2. After the model was displayed at MIT it was apparently sent to West Point. What was the real purpose of such an undertaking, was it used in planning the war, I don’t know.
Another mystery is the photo of arctic explorer, Richard Byrd, with the inscription "Good luck and cordial regards to the students of the Hobby Shop". The story told by Bob McCadden is that Byrd was a friend of Watson’s and left dog sleds and other equipment from his arctic expeditions in the Hobby Shop while he went to serve in WW2. Great story, but I haven’t found any connection of Byrd to MIT yet.

Until 1946 the Hobby Shop was connected through its advisor Arthur Watson to the Technology Museum which was overseen by the Director of the Libraries. There was some “problem” that prompted then Library Director John Burchard to look into this relationship. He found that the Hobby Shop was a valuable resource for students but thought Watson was taking advantage of students by having them do work for the museum. Burchard recommended to President James Killian that the Hobby Shop be separated from the Museum and have its own budget and oversight committee. Killian agreed and the Hobby Shop committee was formed with Prof. Howard Bartlett its first chair.

Through WW2 Joe “Doc” MacAllister was the staff foreman of the Hobby Shop and he hired a young assistant Bob McCadden in 1943. McCadden took over as staff foreman when Joe retired and continued working in the Hobby Shop until 1972.

In 1948 the Shop added another room and doubled in size. One of the interesting projects of that time was the original transmitter for WTBS. The Hobby Shop has been the place where a number of now separate programs have started including the radio station, model railroad club, and student art association.

I’d like to tell two stories that speak to the important role the Hobby Shop has played in MIT student’s lives.

While preparing for our 60th anniversary I received this hand written letter and picture from Chuck Jordan class of 1949. In the spring of 1947 he spent hours in the Hobby Shop constructing the car model he holds in the picture. His model of the car of the future wins him first prize in the Fischer Body contest, $4000 and design job at GM when he graduates. He writes “In 1992, I retired from GM as vice president in charge of design. I am forever grateful for the MIT Hobby Shop.
My time spent in the Hobby Shop was a great relief from the mental exercises at MIT – and, as I turned out, had a profound influence on the rest of my life.

Gerry Milgram ’61 built two Thistle Class sailboats and won successive NE championships with them. He is now Prof. Emeritus in Naval Architecture at MIT. Throughout his career he continued his avocation of builder and designer of sailboats working with America’s Cup racing teams. He was the primary designer of America’s Cubed the winning boat of another MIT grad Bill Koch.

In 1963 the Hobby Shop is moved to its present location in W31-031 the basement of the armory on the corner of Mass. Ave. and Vassar St. The chemistry department wanted the rooms in the basement of building 2 and the new student center was just about to be built. The new student center would have most of the other student activities and it was felt that proximity to it would be an asset. As long time staff foreman, however, Bob McCadden always felt that something of the club spirit of the shop was lost in the move.

When I came to MIT in 1968 and joined the Hobby Shop, Bob was completely in charge of the day to day running of the Shop. The club aspects with the student governance of the original Hobby Shop were gone. It was still popular and there was a dedicated group of members but there were no apprentice, journeymen, master craftsman or student shop foreman positions. As it turned out my four years at MIT were Bob’s last and in the fall of 1972 George Pishenin became Director of the Hobby Shop.

There was still a wide range of projects that members worked on and it seemed like someone would start a trend and then others would follow. Harpsichords were a popular project and a number of my friends got into building acoustic guitars from scratch, a very challenging project.

Some projects still stand out. Certainly one of the highlights was the beautiful bowl made by Irving Fischman that was featured on the very first cover of Fine Woodworking in 1975. Irving while getting his PhD in physics was also trying to make money on the side going to craft fairs with bowls he had made in the Hobby Shop. At one fair he ran into Paul Roman who was just starting FW. Paul asked
Irving if he could borrow the bowl to photograph for the cover, and of course Irving agreed. Paul had always regretted not buying the bowl. When Roman retired from Fine Woodworking; his staff approached Irving who reproduced the bowl as a parting gift for Paul.

I remember working in the Hobby Shop myself when another student was experimenting with making bike frames using large diameter aluminum tubing. His name was Gary Klein and after graduation he started his own bike frame company. Gary has spent his life as an innovative bicycle designer.

Jay Kirsch worked on the prototype for his Aurora clock in the Hobby Shop. The Kirsch Hamilton clock still remains an icon of modern design and is part of the Museum of Modern Arts permanent collection.

The Hobby Shop does not make people successful but it gives imaginative, creative people, space, equipment, instruction and a supportive environment that allows the experimentation needed to make things that work and are beautiful.

In 1991 George Pishenin retired and I was hired to be the new Director. At the time I had my own renovation contracting and custom woodworking business. I wasn’t sure at the time whether taking this job was a good idea. Looking back now I think it was one of the best decisions of my life. As the first graduate of MIT to be director of the Hobby Shop I am proud to have continued the Shops growth and improvement and to bring the same creative opportunity and fun outlet to the MIT community that was so important to my development.

The Hobby Shop remains a unique program which epitomizes the MIT philosophy of educating mind and hand. A university shop facility that is not part of an academic department and is open to all students makes it quite unusual. The fact that it is intentionally for both personal and academic projects and also allows MIT staff, faculty and alums access is totally unique as far as I know. These qualities are critical to the success of the Hobby Shop where so many ideas become reality.

I’m pleased that the Hobby Shop has been recognized in recent years with articles in American Woodworker, Popular Mechanics, the Wall Street Journal and the NY
Times. Everyone seems to be talking about the importance of having creative sandboxes, hacker spaces, and innovation centers. At MIT we’ve had all of these for almost 75 years, the MIT Hobby Shop.

I’d like to end with a slide show of people, projects and classes from my 21 years in the Hobby Shop. And remember, all of you are welcome to join and come build whatever you would like.