



## You were maybe wondering how the Society of Women Engineers got started?

(That's Beatrice, to the left...)

Allison Thiel

Beatrice Hicks, born in 1919 in Orange, New Jersey, lead the way for women as an engineer, inventor, and engineering executive. As a young girl, inspired by New York City's engineering marvels such as the George Washington Bridge and Empire State Building, she told her engineer father that she would also someday become an engineer. Following that vein, in 1935, after graduating from high school, she enrolled at the Newark College of Engineering to pursue a Bachelors in Chemical Engineering. After graduating in 1939, she spent the next three years as a research assistant at the college until the outbreak of World War II, when vacancies left by men entering the military created new career opportunities for women.

In 1942 Beatrice became the first female engineer at Western Electric, a subsidiary of Bell Telephone. At Western Electric, she worked on developing long distance telephone technology and also developed a crystal oscillator that generates radio frequencies and is used in aircraft communications. During this time period she also enrolled at Columbia University and took electrical engineering graduate courses, although she did not earn a degree. She did, however, receive a Masters in Physics later in 1949 from Stevens Institute of Technology.

In 1945 she left Western Electric and became a consultant. In 1946 her consulting career was cut short by the death of her father, and Beatrice instead became Vice President and Chief Engineer of her father's business, Newark Controls Company. Here she pioneered the design, development, and manufacture of

pressure and gas density controls for aircraft and missiles. She also invented a gas density switch that is a key component in systems using artificial atmospheres. Much of the technology developed at Newark Controls at this time was used in the US Space Program. While pursuing her Master's degree and serving as Vice President and Chief Engineer of her company, Beatrice married fellow engineer Rodney Chipp in 1948. She later went on to become president of Newark Controls Company in 1955.

Beatrice's experiences of being a lone woman pioneer in a traditionally male profession exposed her to the hardships, challenges, and lack of encouragement faced by women pursuing careers in science and engineering. This realization led her to co-found the Society of Women Engineers (SWE) in 1950, and Beatrice served as its first president from 1950 to 1952.

In a 1952 article from *Mademoiselle* magazine, Beatrice was quoted on why so few women became engineers: "Women think that an engineer is a man in hip boots building a dam. They don't realize that 95 percent of engineering is done in a nice air-conditioned office."

Compiled from:

<http://www.bartleby.com/66/89/28289.html>

<http://www.societyofwomenengineers.org/pastpresident/hicks.htm>

[http://www.ieee.org/organizations/history\\_center/hicks-b.html](http://www.ieee.org/organizations/history_center/hicks-b.html)

<http://www.greatwomen.org/women.php?action=viewone&id=189>

## What Your Mom Probably Didn't Tell You Before You Left for MTU

(but if she did tell you, kudos to your mom!)

Margot Hutchins

A few thoughts before we get started...

You are a college student and so drugs and alcohol will be available to you. Consuming them will impair your judgment. Excess amounts will eliminate your judgment. YOU will have to decide if and how much to consume. You will also have the opportunity for sexual encounters. Again, YOU will have to decide if and how much to participate.

Alright ladies... my list might cover a few things your mom did tell you or it might repeat a few things your RA told you or you might be an upperclasswoman and have this all down pat, but even the best of us have a lapse in judgment now and then. Here are a few things worth knowing and worth repeating.

- 1 If you're going out, go with someone you trust.** Stick together. Leave together. It might be helpful to have some sort of code word you use if you feel like you need to get out of the situation you're in.
- 2 Always get your own drink and keep track of it.** That means, go to the keg and get it yourself. Open your own cans and bottles. If you put your drink down to go dance, don't come back to it. My brother's a frat boy and his only advice for this article was, "Tell them not to drink from the punch bowl. You don't know what's in that shit." He's right, you have no idea how much alcohol or what else is in there. There have been rumors of roofies on campus.
- 3 If you encounter someone who is dangerously drunk, get them medical attention.** The risks of alcohol poisoning include brain damage and death. Sometimes people don't get to the hospital because someone else is worried about them getting an MIP or getting them in trouble. In the scheme of things, an MIP is nothing compared to what could happen if you let someone "sleep it off."
- 4 Most frat parties have a "sober crew." Their job is to minimize risk at the party.** They are a potential source of support or help if you need it.
- 5 Be aware of strangers.** The amazing person you just met might actually be amazingly scary. Don't leave with someone you don't know.
- 6 Trust your gut feelings about a person or situation.** Your intuition is a powerful thing.
- 7 Don't drink and drive.** Don't get in a car with someone who has been drinking. The risk to yourself is obvious. Drunk driving also puts other (innocent) drivers and pedestrians at risk.
- 8 There are "blue phones" scattered across campus.** Picking up a phone beneath a blue light puts you through to Public Safety's emergency line. They're pretty obvious at night, but less so during the day. In MTU's annual crime report ([www.admin.mtu.edu/psafe/annualcrimereport.pdf](http://www.admin.mtu.edu/psafe/annualcrimereport.pdf)) there's a map on page 11 of all the blue phones on campus—take a look.

continued on back...



Player of the Month

Women's Hockey Club

Meaghan  
Wahlstrom-Ramler

21: Age

Environmental Engineering:  
Major

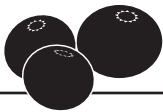
Champlin, MN: Hometown

13: Years Playing Hockey

4th: Year in school

Forward: Position

Blueberries: Favorite food



## Bewitched: My life as a Wiccan student

Lindsay Worden



From the outside, I appear to be the perfectly normal college student. I do well in school, am in a sorority, participate in undergraduate research, volunteer, write for the school paper, and dj a show on the campus radio station.

There is nothing, from the outside at least, that indicates I am any less normal than any other Tech student. In a sense, though, I am very different than many of my peers due to my religious practices: *I'm a witch.*

With Halloween drawing so close, I think it's important to clear up a few of the all too common misconceptions about my faith. Being a witch, or Wiccan, is not like anything that churches, media, or popular culture have made it out to be. We don't command armies of zombies or have talking pet cats. Do I believe in magic? Yes. Do I cast spells? Yes. Do I eat your children? No.

Wicca is very closely tied with Paganism, the oldest known religion on the planet. It is a religion based on understanding nature and the universe. There is no real central deity comparable to the God of Christianity, but the symbolism of the Goddess as Maiden, Mother, and Crone are frequently used to show the cycle of life in the universe.

Now, a quick history lesson for you: Pagans lived quite happily for thousands of years in Northwestern Europe until Jesus existed and

the Church came in and decided that they all needed to become Christians. One of the tactics used was to transform Pagan holidays and traditions into Christian events. For instance, the date for Christmas was chosen due to its proximity to the Pagan holiday of Yule, thus uniting the two. The Christmas tree, feast, wreaths, and Yule log are all Pagan traditions for celebrating Yule, not Christmas.

The Church also began many of the nasty rumors that still circulate about witches today. Devil worship, human sacrifice, supernatural powers, and "black magic" were all rumors that were created by the Church to strengthen the anti-Pagan movement. The irony is that Wicca is one of the most peaceful and tolerant religions in existence. Two of the cornerstones of Wicca are the Golden Rule and the Rule of Three, which states that anything you put out into the world comes back to you times three, whether it be good or bad. You don't hear stories of Pagans killing in the name of religion or torturing those that do not share their beliefs.

I've been Wiccan for the past three years or so. I am a former Christian, so believe me, I definitely know what I'm missing—or not. It has been difficult at times because finding information, ritual items, and other followers is much harder as a student. Most of my friends don't understand or even know about my religion because their beliefs condemn mine. I can't even pledge my allegiance to my country without acknowledging a god I do not believe in.

One of the big problems that many have with my faith is that I do not believe in God. Nope, sorry, I don't think there is a big man in the sky controlling my destiny. For some reason, this is a difficult concept for people to grasp. It always strikes me as funny that many think my religion is weird or far-fetched. How is the oldest faith in the world not believable when you claim that your god was a man that could walk on water and rise from the dead? Wiccans also do not believe in the Devil, which makes that whole Satanic worship thing a little difficult.

Some common rumors and beliefs about witches are true, however. We do use brooms, but not to fly around; instead, they very often have ceremonial significance in spells. The same thing goes for cauldrons and candles, too, actually. I believe in astrology and the significance of full moons. People often find this foolish, which is fine with me, because I usually find their religion just as ridiculous. One of the principal beliefs of my faith is that each person controls his or her own destiny and determines who they would like to become; that is already more than I can say of other religions.

I'm very proud of my beliefs and what they stand for. Despite the fact that I am not afforded many of the luxuries that other religions receive, such as tolerance, acceptance, and respect, I still think that I made one of the luckiest discoveries in my life when I found Wicca.

Blessed be, my friends!

9 If something does happen to you (anything, not just stuff at a party, stuff with school, roommates, food, parents or anything else) please get help! Counseling Services on campus is confidential and FREE to students (487-2538). Dial help is another great resource (482-4357). Either one will provide you with support and options for dealing with your situation.

10 Birth control is available on a sliding scale, based on income (think: cheap for students) from the Western UP District Health Department in Hancock (482-7382). The city buses can get you there. Condoms are free.

There are lots more suggestions for safety at [www.4collegewomen.org](http://www.4collegewomen.org). There's also a comedian, Bernie McGrenahan, coming to Tech to share his thoughts on high-risk drinking....it will be worth checking out. Free for students, at the Roza, October 6 at 7 pm.

## Top 5 Rules for Safe Partying!

from Allison Thiel

I asked the Sexual Assault Nurse Examiner, a Lake Linden Police officer, and the Dial Help Advocate what they wanted to get across to tbt readers. They said:

- 1 NEVER go to parties alone.
- 2 Leave no woman behind!!! It doesn't matter if the people at the party say they will "take care of her." Instead, insist, use whatever force necessary—call the police if need be—just get her out of there and home with you where you know you will take care of her and nothing bad can happen
- 3 They're all nice guys! If they weren't you probably wouldn't be talking to them in the first place
- 4 Bring your own alcohol to a party. To keep it clean and drug-free, keep it capped and keep it with you at all times.
- 5 The #1 date rape drug is alcohol. Watch how much you consume and who you're with.

what to watch...?  
hungry for visual sustenance?  
various tbt-ers recommend the following:

### Iron Jawed Angels

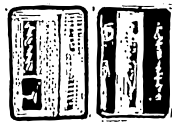
on HBO. "They had no vote, no political clout, no equal rights. But what they lacked under the law they made up for with brains, determination and courage." Do not take your right to vote for granted—learn about what it took for all you babes to be able to cast a ballot. You'll probably be surprised by the bloodshed. (<http://www.hbo.com/films/ironjawedangels>)

### Antonia's Line

available to rent on VHS/DVD. This film won the Academy Award for best foreign language film of 1995—but don't let that scare you off. This is a very funny and warm movie—and one that will show you the powers you have to live well and most often happily with others, a really wide range of others...

### Vera Drake

directed by Mike Leigh, and out in theaters elsewhere but chances of coming to Houghton...?The fictional film follows the life of a backstreet abortionist in 1950s London. Leigh says he hopes the film will "pose a moral dilemma" for the audience and said: "I felt very strongly it was time to deal with [abortion] directly in a way I hope poses a moral dilemma for the audience and doesn't draw simple black and white conclusions. You have to consider whether this woman, and these women she helps, are innocent or not." Leigh says the film shows how working class women were forced to resort to backstreet abortions while the rich exploited a loophole. "In many parts of the world that remains the case and it is a massive problem that is very difficult to solve," Leigh said. (Description from the BBC.)



## Boycott for Equality

from PRNewswire

ATLANTA, Sept. 22 Organizers of the **Boycott For Equality** are expanding their nationwide walkout to include a coordinated cash withdrawal from the economy on October 8.

To demonstrate the need for equality in marriage and the workplace, straight and gay supporters will each take out \$80 from their local ATM. Boycott For Equality expects the action will exhaust the cash in many ATMs, leaving a reminder of gay economic power to all who try to use them throughout the long bank weekend.

To further drive home the lessons taught during the Boycott, participants should refer to the Boycott when communicating with their elected representatives, particularly when candidates ask for money to fund their campaigns.

"Let them know you participated in the Boycott," explained Boycott For Equality Co-Founder Dale Duncan. "Just take your ATM receipt, cross out your account number, circle your balance, write GAY MONEY on it and mail it to campaign headquarters in the postage paid envelope they provide. They'll get the message that nobody in America can be taken for granted."

The amount represents the amount the average member of the Lesbian, Gay, Bisexual and Transgender (LGBT) community contributes to the US economy each day, and could grow beyond the \$1.4 billion that LGBT workers contribute each day—more than \$500 billion each year according to computations by Washington D.C.-based public relations firm Witeck-Combs Communications.

The walkout combines several actions highlighting the various ways that Lesbian, Gay, Bisexual and Transgender (LGBT) citizens contribute to the economy on a regular basis. Other components of the Boycott include a one-day work stoppage or "pink flu" day to demonstrate solidarity to employers and colleagues; a moratorium on spending for goods and services such as gas, food and clothing, to show retailers what would happen if 7% of their revenue goes away; closures by sympathetic businesses to make their customers aware of how dependent Americans are upon each other; and a halt to cell phone use to spread the plea for equality throughout the participant's network.

Close to fifty businesses and 15,000 people have already pledged to participate using the online forms at the group's web site. Some major groups that have endorsed or encouraged Boycott For Equality Day include Don't Amend: The Equality Campaign, The Advocate magazine, Civil Marriage US, several local PFLAG chapters, DC Diversity, Equality Illinois and Wyoming Equality.

In at least 36 states it is still legal to fire someone because of their sexuality—even if they never bring it into the workplace. And nowhere in the United States are these taxpayers able to file joint federal income tax, combine tax deductions, or access their partner's social security or disability benefits.

Boycott For Equality is an Atlanta-based non-profit formed to promote the boycott, scheduled this year for October 8. For that day, LGBT Americans and their straight allies are encouraged to withdraw from the economy in five specific areas:

- 1 Stay home from work. Do not generate payroll taxes, income taxes or add to the economy. If you run a business, let your customers know by closing for the day.
- 2 Withdraw \$80 from your bank account at an ATM.
- 3 Don't shop. Do not generate sales tax or business revenue.
- 4 Hang up your cell phone. Your silence will affect your whole communications network.

For more information, visit <http://www.boycottforequality.org>



## March for Women's Lives: April 25, 2004

Michelle Edith Jarvie (that's Debbie Stabenow, Michelle E. Jarvie, and Katrina Keteri up above)

Last April, I drove to Marquette to hop on a bus with some fellow tbt staffers and ride 22 hours to our nation's capitol for the March for Reproductive Choice. From last year's late term abortion ban to the slim margin held in the Supreme Court in favor of Roe v. Wade, I felt (and still feel) my rights were under attack. I found more than enough information on the large scale of Bush's attack on choice, but what surprised me most at the march were the stories from older women who remember when abortion was illegal.

Women of our generation have the luxury of moral debate. We can proudly argue whether or not we, as individuals, would have an abortion in the case of unexpected pregnancy. The fact is, our mothers fought for this right. It was hard won. They protested, smuggled each other across borders, and went to jail for this right. Our mothers fought so that we would have freedom and decision but most of all safety.

Yes, safety. The most astonishing thing I learned at the march was that when abortion is not legal, it still happens, but women DIE from unclean or home attempted procedures. I spoke with one woman whose sister had lost her uterus, and almost her life, due to an illegal and unsafe procedure. And in states with parental consent laws, like Michigan, clinics are documenting desperate attempts by young women to self abort. That's right, our nation's youth are resorting to the same unsafe attempts to abort—from knitting needles to

gasoline douches—that our mothers fought to stop. That is exactly what the speakers at the March spoke about, collective fear of return to the dark days before abortion was safe and legal. It was the stories and images from those days that strengthened my belief that abortion should be kept safe and legal.

Along with energizing my belief in the absolute necessity of freedom of choice, marching on Washington filled me with a new passion to get involved in government and to encourage others to do so. I believe the concerns of women and minorities will only be addressed when women and minorities have adequate representation within our government. Every woman politician who spoke at the March mentioned the importance of electing women to office. Hillary Clinton made us all promise to encourage a woman to run for office, or run for office ourselves, at any level of government. Senator Stabenow, whom I had the good fortune to meet at an event for Michigan marchers, spoke about how women in government raise issues related to themselves and their children, like education and health care.

Though we can't all run for office, we can all get involved. We can vote for women and pro-choice candidates. We can write our representatives and visit them in their offices. And yes, we can even march on Washington.



## RESOURCES

Barbara Kettle Gundlach Shelter ..... 337-5623 <i>domestic violence shelter; 24-hour crisis line</i>	Legal Services of Northern Michigan..... 482-3908
Career Counseling ..... 487-2313	Office of Student Affairs..... 487-2212; 487-2465
Counseling Services ..... 487-2538	Office of Residence Life..... 487-3404
Dial HELP ..... 482-4357 <i>Crisis intervention: a gentle, helpful voice, 24 hours a day, 7 days a week</i>	On-campus emergencies ..... 123
Employee Assistance Program ..... 482-2299	Society of Intellectual Sisters (SIS)..... <a href="http://www.sos.mtu.edu/sis/">http://www.sos.mtu.edu/sis/</a> <i>Promoting sisterhood primarily among African-American women and scholarship among members</i>
Houghton Community Health Center ..... 483-1860	Society of Women Engineers ..... <a href="http://www.sos.mtu.edu/swe/">http://www.sos.mtu.edu/swe/</a>
Keweenaw Pride..... <a href="mailto:pride@mtu.edu">pride@mtu.edu</a> <i>an MTU group for Gay, Lesbian, Bisexual, Transgendered or Questioning Students, Staff, Faculty, Community Members, Friends, and Allies</i>	Western UP District Health Department .482-7382 <i>AIDS testing, family planning, immunization, pregnancy testing</i>

## WHAT IS tbt POLICY ?

The TechnoBabe Times is dedicated to the empowerment of women in all aspects of technology.

We want tbt to be a place where voices not usually heard or seen on campus or in the community can be seen & heard. We want to be a publication that encourages new and different voices. And so: we solicit thoughtful, reflective, critical writings (or drawings or mixed media pieces or poems or...) that offer us all positive views and smart actions...

If you have any ideas, questions or comments—or wish to advertise in tbt—please contact our staff at [tbt@mtu.edu](mailto:tbt@mtu.edu). You may also write the list to submit a piece of work or to become part of the tbt staff (all girls and boys interested in the cause are welcome!).

THANK YOU to the CCLI for help on this issue.

TBT IS: **staff:** Kristin Arola, Erin Brandt, Crystal Buchanan, Anna Cynar, Matt Hill, Margot Hutchins, Ariana Jo Jeske, Diane Koskela, Matt Larson, Hannah Mongiat, Ashleigh Parks, Ashley Routhier, Jon Soper, Cassie Thiel, Allison Thiel, Lindsey Worden **president:** Michelle Edith Jarvie **layout:** the committee **faculty advisor:** Anne Frances Wysocki