## **Thesis Project Portfolio**

Liquor-Based Canned Cocktail Production: Fizzy with the Rizzy

(Technical Report)

## Analysis of the Virginia Appalachian Moonshine System in Relation to the Prohibition Movement and the Impacted Local Culture

(STS Research Paper)

An Undergraduate Thesis

Presented to the Faculty of the School of Engineering and Applied Science

University of Virginia • Charlottesville, Virginia

In Fulfillment of the Requirements for the Degree

Bachelor of Science, School of Engineering

**Reagan Scaglione** 

Spring, 2023

Department of Chemical Engineering

## **Table of Contents**

Sociotechnical Synthesis

Liquor-Based Canned Cocktail Production: Fizzy with the Rizzy

Analysis of the Virginia Appalachian Moonshine System in Relation to the Prohibition Movement and the Impacted Local Culture

Prospectus

## **Sociotechnical Thesis**

Government regulatory bodies face many complex obstacles when attempting to impart effective influence on the culture of alcohol consumption and production due to the influence of societal and technological factors. This research focuses on the improvements in fermentation and distillation systems in the Appalachian region throughout and after the prohibition era and their evolving relationship with societal factors. Human and societal aspects related to this technology are also important to consider since the societal shifts of the prohibition provided the motivation for the implementation and improvements of this technology. Additionally, the technological shifts largely impacted the local workforce and culture as well as the national drinking culture. The social technical framework Technological Momentum created by Thomas P. Hughes will be applied to the analysis of this socio-technical problem and the relationship between the developing technology in the prohibition era and the culture and societal impacts. Technological momentum describes the shifting magnitudes of cultural and technological influence over a time period, stating that initially the cultural changes have the majority of power then over time as the technological system develops it gains control and ultimately is the driving influence over the culture. Technological developments will be researched through historical Franklin County museum exhibits and regulatory statistics from ATF and FBI enforcement on alcohol production setups. Furthemore, the cultural and societal impacts will be researched through analysis of biographies and cultural exhibits portraying the experience of those living through the prohibition era. From this research I expect to gain more insight into the power dynamic of technology, society, and regulations on alcohol culture, how those influences are limited in magnitude and how when one works in an imposing direction of the others it lacks effectivity. Given the inherent dangers of alcohol consumption on individuals and society the implications of this research is further insight to aid in effective alterations to alcohol culture to mitigate harm. For example, understanding of the failure of the United States prohibition served as a cautionary tale when attempts were made to alter drinking culture during the covid 19 pandemic to limit the spread of the virus. The regulations in the covid case worked to redirect drinking culture to home consumption and socially distanced gatherings rather than restricting it completely.