The prospect of a Chinese invasion of Taiwan and the impact it would have on the region has been a subject of concern for many years. The aim of this thesis is to analyze the potential outcome of air warfare in such an event, focusing on changes in Chinese and Taiwanese military capabilities over time. Drawing on previous RAND Corporation research published over the past two decades, this thesis examined two aspects of a potential Chinese invasion, the possibility of a disarming strike against Taiwanese air defenses and air bases, and the possible outcome of air warfare. To accomplish this, the critical variables from previous studies were examined and the development of their values was assessed through a mixture of quantitative and qualitative analysis. The thesis finds that China currently has the upper hand in military capabilities, making it unlikely that Taiwan could sustain a full-scale air war without U.S. support. The study also discusses possible future developments in the contest for air superiority over Taiwan in the next decade and offers policy implications for Taiwan to maintain close ties with its allies and invest in its military capabilities, especially air defense.