Attacks on police stations (APS) pose a great danger to the personal safety of law enforcement officers and citizens, and offenders may use weapons such as homemade bombs, knives, and firearms. Such APS incidents have resulted in serious casualties in China. Not only that, but Belgium and France have also reported similar APS incidents. Therefore, this study aims to investigate the defensive behavioral decisions and movement patterns of police officers during APS incidents. It is also the first exploration of APS incidents in Chinese policing practice. This research could enhance the understanding of APS incidents and support law enforcement officers in developing preventive policies. For this study, researchers conducted online interviews with 30 first-line officers from Chinese police stations. Then, the researchers used Behavioral Sequence Analysis (BSA) methods to analyze the behavioral decisions and movement patterns of police officers with hysteresis to form a state transition diagram depicting police officer behavior. The results showed multiple defensive behavioral decisions of police officers, often focused on "reducing casualties" and "arresting offenders." Among them, the results clearly show that the behavioral decision making of most police officers prioritizes the search for weapons, which may be due to the fact that officers usually do not carry personal equipment in the police station. In addition, the study results also show that police officers have similar movement patterns in APS incidents and are closely linked to the behavioral chain. In conclusion, this study is an exploratory study of APS incidents. This is not only an academic exploration of violence against police, but can help frontline law enforcement in police practice.