

## I. Dynasty 336

### Chapter 336: The Ascending Hot Air Balloon

In Qingzhou, front-line battle reports were quickly transmitted back to Prince Qi's residence via the official relay stations along the road.

The news that the barbarian commander Kuha had been slain and his ten-thousand-strong unit shattered reached the Governor's Mansion within a single day. Niu Ben had specially ordered the relay to deliver the news overnight to Qingzhou.

"Excellent! Niu Ben executed a flawless field annihilation outside Yunzhou. According to his report, our casualties were almost negligible—a true and total victory."

In the Governor's Hall, Xiao Ming handed the report to Zhan Xingchang.

Zhan studied the document intently, stroking his beard as he smiled and commented:

"It appears that flintlock rifles, when combined with this new formation, now allow the Qingzhou army to fight the barbarians even in open terrain. If that's the case, we may even be able to stand toe-to-toe with Chagatai's main force."

"Niu Ben wrote that he plans to rest a few days before advancing to Jizhou. The success of combining hollow square and wagon fort formations has clearly bolstered his confidence," Xiao Ming said.

“Your Highness,” Zhan replied, “perhaps it’s unwise to have General Niu advance into Jizhou so hastily. Chagatai’s forces still hold the upper hand in numbers. Once we push further into Jizhou, our supply lines will be dangerously extended. The region is crawling with displaced mobs—if the barbarians or rebels sever our logistics, our soldiers would be in grave danger. We’re aiding Jizhou, yes, but preserving our strength must also be a priority.”

Xiao Ming nodded. Qingzhou soldiers didn’t fear battle—they feared running out of rations. If Chagatai surrounded the Qingzhou army without launching a direct assault, within ten days they’d face starvation.

“So what do you propose?” Xiao Ming asked. In the realm of ancient political strategy, Zhan was the true expert.

“Wait for the imperial guard and Wei Prince’s army to move. Let Wei Prince’s troops guard our supply lines. He’s unlikely to agree to spearhead the assault, but if it’s about protecting the grain, he won’t refuse.”

Pang Yukun added:

“Zhan speaks wisely. The troops sent by Wei Prince this time belong to the so-called ‘Mountain Camp’ — the most worthless of his units.”

“So I can only rely on the imperial guards in this Jizhou affair?” Xiao Ming sighed, frustration rising.

He was deeply angered. How could Great Yu, plagued with backstabbing and infighting, ever hope to fend off the barbarians?

“I’m afraid so,” Zhan said solemnly. “And remember, Chagatai is only the vanguard. If Baishan arrives, Qingzhou’s forces will be in real trouble.”

Xiao Ming let out a long breath. Niu Ben had taken nearly all his elite troops. He couldn’t afford to lose them on someone else’s behalf.

Just like Zhan said—aid Jizhou, but don’t get used as someone else’s blade.

The ever-cunning Wei Prince would gladly pay money to avoid sending soldiers.

Still, Xiao Ming also saw the silver lining: the battlefield would temper his troops, and perhaps even foster new military talents.

After the discussion, Xiao Ming drafted an order instructing Niu Ben to wait for Wei Prince’s army before advancing into Jizhou.

He also renewed instructions to lead refugees into Qingzhou.

More than ever, he realized: population was military strength. Population was productivity. Without enough people, his territory couldn’t sustain a war effort.

This was the tragedy of small states facing large ones—even with similar weapons, sheer numbers could destroy them.

His territory had only one-fourth the population of the barbarians—and that didn't even count the barbarians' slaves.

That's why he was desperate to attract people. Under Prince Yong's rule, the civilians lived miserably. But if they came to his lands, things would be different.

They would serve as recruits for the army and laborers for every industry in Qingzhou.

Only with sufficient manpower could he grind the barbarians down through attrition until they collapsed.

Just as Xiao Ming was engrossed in writing orders, a commotion arose outside the Governor's Mansion.

A guard rushed in, breathless.

"Your Highness! There's something strange in the sky!"

"In the sky?" Xiao Ming paused—then suddenly smiled. He turned to Pang Yukun and Zhan Xingchang:

"Come on. Let's go take a look."

The two officials followed, intrigued.

Out on the streets, the citizens of Qingzhou had all stopped in their tracks, staring upward and murmuring.

In the sky above, a giant gray balloon was slowly drifting. It hovered about fifty meters above the ground.

Its ten-meter diameter made it appear massive. You could see it from anywhere in Qingzhou.

“Your Highness, what... what is that?” Zhan Xingchang gasped in alarm.

Like most of Great Yu’s officials, Zhan was steeped in superstition and couldn’t help associating the sight with spirits and omens.

Pang Yukun and Zhan both looked pale with fear.

Some citizens on the streets even clasped their hands in prayer, muttering to themselves.

“Don’t panic. That’s a hot air balloon—something the students at Bowen Academy developed,” Xiao Ming explained.

He looked up. The balloon appeared unmanned, with only a burning brazier suspended below. A rope still trailed from its side.

He realized: the balloon must’ve broken free during a test flight and floated off on its own.

Sure enough, he soon spotted Lin Wentao running down the street, jumping and trying to grab the trailing rope.

Behind him, physics students shouted frantically, waving and yelling,

“Come down! Come down!”

“Idiot,” Xiao Ming muttered, exasperated. “Someone could die from this.”

He was familiar with Lin Wentao’s research. The student had used tong oil as fuel for the hot air balloon.

Tong oil, traditionally used to waterproof wood, also served as lamp oil in many rural households.

Instead of burning straw like the primitive designs described in textbooks, Lin Wentao had refined and modernized the balloon with tong oil.

The earliest hot air balloons had very limited endurance—only about 20 minutes of flight, with a max distance of 20 li (around 10 km).

By using tong oil, the balloon could fly much farther.

Still, its energy density was far lower than modern propane or natural gas. At best, the tong oil setup could extend flight time by a factor of five.

Without refined fuels like propane, this was the hard limit of current balloon technology.