



SKILL GAME SCHOOL
STRATEGY LAB

SGS FIELD GUIDE

21 Blitz Strategy Guide

Board shape, bust control, streak timing, and selective undo

PLAY
SMARTER
LAB TESTED

VERSION 1.0 / JULY 2026 / KAPOTEL LLC

Appendix: How this was derived

Most buyers can skip this section. It exists so you can check my work.

Method

I built a full 21 Blitz engine with four columns, three strikes, wild Black Jacks, the streak schedule, and a 180-second clock worth 10 points per remaining second. I validated its scoring against 28 real game-over panels from recorded matches. All 28 reconciled exactly as $\text{Final} = \text{Base} + \text{Streaks} + \text{Combo} + \text{Time}$, and controlled play tests verified each per-clear case, including a Black Jack landing as the fifth card.

Different play strategies were compared on identical deck orders, so every strategy faced exactly the same cards and the differences came from decision quality. The model charged 1 second per placement and 1.5 seconds per undo cycle instead of treating thought and peeking as free.

Key results

The recommended play style, benchmarked at scale. The strongest strategy I found was an expected-value search built around the board-spread and escape-column principles in this guide. On 750 fresh, never-tuned decks, it averaged about **8,730 displayed score, 14.8 clears, and 1.2 busts per game**.

The five-card trap (120 paired decks). I ran the same search twice: once valuing clears at their true payouts, which makes five-card clears look 1.5 times as valuable as a normal 21, and once valuing every clear identically. The equal-value player won decisively: about **+1.0 more clears and 0.25 fewer busts per game**, and its three-bust-out rate dropped from 39% to 31% (sign test $p < 0.0000001$). Even a computer hurt itself by chasing the five-card premium; the busts and lost flexibility cost more than the bonus paid. That is the research behind "let five-card bonuses happen to you."

Undo pricing (320 decks). Against the selective-undo baseline (about 2-3 undos per game, only at genuine decision points), a player undoing about three times as often lost about **233 displayed points per game** ($p = 0.003$), and one undoing on roughly half of its placements lost about **502** ($p < 0.000000001$). The extra information never bought back its clock cost. That is Rule 5.

How close to perfect are these rules? I audited the recommended strategy against a deep exhaustive search on sampled positions. The **median decision lost 0 points**, the mean lost about 7, and only about 2% of decisions were meaningfully suboptimal. The rules in this guide compress a policy that is already near the playable ceiling. The remaining gap is execution speed and accuracy, which is what the drills train.

Limitations

- The per-clear values and panel labeling are verified, but the exact Base-versus-Combo split for wild-assisted five-card 21s is a display convention I have inferred rather than exhaustively enumerated; totals are unaffected.
- The undo and placement time costs (1.0s / 1.5s) are modeled from observed play pace, not measured per-player. If you are much faster or slower, the undo break-even shifts accordingly.
- Benchmarks are simulator results. Live scores also depend on reading speed, mistakes under pressure, and opponent pool.

Version history

Future editions will record material corrections, new research, and new training features here. Typographic-only fixes may not change the edition number.

Version	Date	Changes
1.0	July 2026	First public edition. Establishes the board-shape system, verified scoring and streak rules, selective-undo guidance, worked examples, drills, and research appendix.

The strategy in 1 paragraph

Keep one column low. Spread your totals so high cards always have somewhere to land. Build 10s and 11s when you can do it without making the rest of the board fragile. Take natural 21s and natural streaks, but do not wreck board shape chasing five-card bonuses. Treat busts as serious because they cost strikes, cards, clock, and streak progress, even though the column clears. Use Black Jacks when they create leverage, not merely when you are scared. Undo only when the next card can genuinely change your choice.

