

- A.1 — Half square loop (K1)
- A.2 — Half square loop, inverted entry (K1)
- A.3 — Half square loop with half roll up (K2)
- A.4 — Half square loop with half roll up, inverted entry (K2)

- A.11 — Half square loop from top (K1)
- A.12 — Half square loop from top, inverted entry (K1)
- A.13 — Half square loop from top, half roll down (K2)
- A.14 — Half square loop from top, half roll down, inverted entry (K2)

- B.1 — Half loop (K1)
- B.2 — Half outside loop, inverted entry (K1)
- B.3 — Half outside loop from top (K1)
- B.4 — Half loop from top, inverted entry (K1)

- C.1 — Split "S" (half roll, half loop from top) (K2)
- C.2 — Half inside loop, half roll, from top, inverted entry (K2)
- C.3 — Half outside loop, Split "S", full roll, from top (K2)
- C.4 — Half inside loop, Split "S", full roll, from top, inverted entry (K2)

D.5 Immelmann Turn from upright with $\frac{1}{4}$ roll, knife-edge half loop up, $\frac{3}{4}$ roll, exit upright (K4)

D.6 Immelmann Turn from upright with $\frac{1}{4}$ roll, knife-edge half loop up, $\frac{3}{4}$ roll, exit inverted (K4)

D.7 Immelmann Turn from upright with $\frac{1}{4}$ roll, knife-edge half loop down, $\frac{3}{4}$ roll, exit upright (K4)

D.8 Immelmann Turn from upright with $\frac{1}{4}$ roll, knife-edge half loop down, $\frac{3}{4}$ roll, exit inverted (K4)

D.9 Immelmann Turn from inverted with $\frac{1}{4}$ roll, knife-edge half loop up, $\frac{3}{4}$ roll, exit upright (K4)

D.10 Immelmann Turn from inverted with $\frac{1}{4}$ roll, knife-edge half loop up, $\frac{3}{4}$ roll, exit inverted (K4)

- E.1 — Figure 9 from bottom (K1)
- E.2 — Figure 9 from bottom, inverted entry (K1)
- E.3 — Figure 9 from bottom, half roll up (K2)
- E.4 — Figure 9 from bottom, half roll up, inverted entry (K2)

- E.11 — Figure 6 from middle (bottom first) (K1)
- E.12 — Figure 6 from middle (bottom first), inverted entry (K1)
- E.13 — Figure 6 from middle (bottom first), half roll up (K2)
- E.14 — Figure 6 from middle (bottom first), half roll up, inverted entry (K2)

- E.21 — Figure 9 from middle (top first) (K1)
- E.22 — Figure 9 from middle (top first), inverted entry (K1)
- E.23 — Figure 9 from middle (top first), half roll down (K2)
- E.24 — Figure 9 from middle (top first), half roll down, inverted entry (K2)

- E.33 — Figure 6 from top (K1)
- E.34 — Figure 6 from top, inverted entry (K1)
- E.35 — Figure 6 from top, half roll down (K2)
- E.36 — Figure 6 from top, half roll down, inverted entry (K2)

- F.1 — Half cuban eight (K2)
- F.2 — Half cuban eight, inverted entry (K2)

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F.13 Half cuban eight from top (K2)
F.14 Half cuban eight from top, inverted entry (K2)

~~F.21 Half reverse cuban eight (K2)~~
~~F.22 Half reverse cuban eight, inverted entry (K2)~~

~~F.33 Half reverse cuban eight from top (K2)~~
~~F.34 Half reverse cuban eight from top, inverted entry (K2)~~

E.45 Figure 9 from bottom upright with snap roll up (K3)
E.46 Figure 9 from bottom inverted with snap roll up (K3)
E.47 Figure 9 from bottom upright with 1 ½ snap rolls up (K3)
E.48 Figure 9 from bottom inverted with 1 ½ snap rolls up (K3)

E.49 Figure 9 from bottom upright with integrated roll in top 180° of loop, exit inverted (K3)
E.50 Figure 9 from bottom inverted with integrated roll in top 180° of loop, exit upright (K3)

E.51 Figure 6 from top upright with integrated ½ roll on bottom 180° of loop, exit upright (K3)
E.52 Figure 6 from top inverted with integrated ½ roll on bottom 180° of loop, exit inverted (K3)

F.41 Half Cuban Eight from upright up with ½ roll integrated in first 180° of loop, exit upright (K3)
F.42 Half Cuban Eight from inverted up with ½ roll integrated in first 180° of loop, exit inverted (K3)
F.43 Half Cuban Eight from upright up with roll integrated in first 180° of loop, exit inverted (K4)
F.44 Half Cuban Eight from inverted up with roll integrated in first 180° of loop, exit upright (K4)
F.45 Half Cuban Eight from upright down with ½ roll integrated in first 180° of loop, exit upright (K3)
F.46 Half Cuban Eight from inverted down with ½ roll integrated in first 180° of loop, exit inverted (K3)
F.47 Half Cuban Eight from upright down with roll integrated in first 180° of loop, exit inverted (K4)
F.48 Half Cuban Eight from inverted down with roll integrated in first 180° of loop, exit upright (K4)

~~H.1 Stall turn, half rolls (K2)~~
~~H.2 Stall turn, half rolls, inverted entry (K2)~~

J.17 Top Hat, from upright, three consecutive ¼ rolls up, 1 ¾ snap roll down, exit upright (K4)
J.18 Top Hat, from upright, three consecutive ¼ rolls up, 1 ¾ snap roll down, exit inverted (K4)
J.19 Top Hat, from inverted, three consecutive ¼ rolls up, 1 ¾ snap roll down, exit upright (K4)
J.20 Top Hat, from inverted, three consecutive ¼ rolls up, 1 ¾ snap roll down, exit inverted (K4)
J.22 Top Hat, from top upright, ¾ roll down, 1 ¾ snap roll up, exit upright (K4)
J.23 Top Hat, from top upright, ¾ roll down, 1 ¾ snap roll up, exit inverted (K4)
J.24 Top Hat, from top inverted, ¾ roll down, 1 ¾ snap roll up, exit upright (K4)
J.25 Top Hat, from top inverted, ¾ roll down, 1 ¾ snap roll up, exit inverted (K4)

J.26 Top Hat, from upright, ¾ roll up, 1 ¼ snap roll down, exit upright (K4)
J.27 Top Hat, from upright, ¾ roll up, 1 ¼ snap roll down, exit inverted (K4)
J.28 Top Hat, from inverted, ¾ roll up, 1 ¼ snap roll down, exit upright (K4)
J.29 Top Hat, from inverted, ¾ roll up, 1 ¼ snap roll down, exit inverted (K4)
J.30 Top Hat, from top upright, ¾ roll down, 1 ¼ snap roll up, exit upright (K4)
J.31 Top Hat, from top upright, ¾ roll down, 1 ¼ snap roll up, exit inverted (K4)
J.32 Top Hat, from top inverted, ¾ roll down, 1 ¼ snap roll up, exit upright (K4)
J.33 Top Hat, from top inverted, ¾ roll down, 1 ¼ snap roll up, exit inverted (K4)

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J.34 Top Hat, from upright, $\frac{1}{2}$ roll up, snap roll down, exit upright (K3)
J.35 Top Hat, from inverted, $\frac{1}{2}$ roll up, snap roll down, exit inverted (K3)
J.36 Top Hat, from top upright, $\frac{1}{2}$ roll down, snap roll up, exit upright (K3)
J.37 Top Hat, from top inverted, $\frac{1}{2}$ roll down, snap roll up, exit inverted (K3)

J.38 Top Hat from top upright with $2\frac{1}{4}$ turn Spin entry, $\frac{3}{4}$ Roll up, exit upright (K4)
J.39 Top Hat from top upright with $2\frac{1}{4}$ turn Spin entry, $\frac{3}{4}$ Roll up, exit inverted (K4)
J.40 Top Hat from top inverted with $2\frac{1}{4}$ turn Spin entry, $\frac{3}{4}$ Roll up, exit upright (K4)
J.41 Top Hat from top inverted with $2\frac{1}{4}$ turn Spin entry, $\frac{3}{4}$ Roll up, exit inverted (K4)

J.42 Top Hat from top upright with 2 turn Spin entry, Full Roll up, exit inverted (K3)
J.43 Top Hat from top inverted with 2 turn Spin entry, Full Roll up, exit upright (K3)

J.44 Top Hat from top upright with 2 turn Spin entry, four consecutive $\frac{1}{4}$ rolls up, exit inverted (K3)
J.45 Top Hat from top inverted with 2 turn Spin entry, four consecutive $\frac{1}{4}$ rolls up, exit upright (K3)

K.9 45° up-line from upright, $\frac{1}{4}$ roll, knife-edge half loop (up or down), three consecutive $\frac{1}{4}$ rolls down, exit upright (K4)
K.10 45° up-line from upright, $\frac{1}{4}$ roll, knife-edge half loop (up or down), three consecutive $\frac{1}{4}$ rolls down, exit inverted (K4)
K.11 45° up-line from inverted, $\frac{1}{4}$ roll, knife-edge half loop (up or down), three consecutive $\frac{1}{4}$ rolls down, exit upright (K4)
K.12 45° up-line from inverted, $\frac{1}{4}$ roll, knife-edge half loop (up or down), three consecutive $\frac{1}{4}$ rolls down, exit inverted (K4)

K.13. 45° up-line from upright, $\frac{3}{4}$ roll, knife-edge half loop (up or down), three consecutive $\frac{1}{4}$ rolls down, exit upright (K4)
K.14. 45° up-line from upright, $\frac{3}{4}$ roll, knife-edge half loop (up or down), three consecutive $\frac{1}{4}$ rolls down, exit inverted (K4)
K.15. 45° up-line from inverted, $\frac{3}{4}$ roll, knife-edge half loop (up or down), three consecutive $\frac{1}{4}$ rolls down, exit upright (K4)
K.16. 45° up-line from inverted, $\frac{3}{4}$ roll, knife-edge half loop (up or down), three consecutive $\frac{1}{4}$ rolls down, exit inverted (K4)

K.17. 45° up-line from upright, three consecutive $\frac{1}{4}$ rolls, knife-edge half loop (up or down), $\frac{1}{4}$ roll down, exit upright (K4)
K.18. 45° up-line from upright, three consecutive $\frac{1}{4}$ rolls, knife-edge half loop (up or down), $\frac{1}{4}$ roll down, exit inverted (K4)
K.19. 45° up-line from inverted, three consecutive $\frac{1}{4}$ rolls, knife-edge half loop (up or down), $\frac{1}{4}$ roll down, exit upright (K4)
K.20. 45° up-line from inverted, three consecutive $\frac{1}{4}$ rolls, knife-edge half loop (up or down), $\frac{1}{4}$ roll down, exit inverted (K4)

K.21. 45° up-line from upright, three consecutive $\frac{1}{4}$ rolls, knife-edge half loop (up or down), $\frac{3}{4}$ roll down, exit upright (K4)
K.22. 45° up-line from upright, three consecutive $\frac{1}{4}$ rolls, knife-edge half loop (up or down), $\frac{3}{4}$ roll down, exit inverted (K4)
K.23. 45° up-line from inverted, three consecutive $\frac{1}{4}$ rolls, knife-edge half loop (up or down), $\frac{3}{4}$ roll down, exit upright (K4)
K.24. 45° up-line from inverted, three consecutive $\frac{1}{4}$ rolls, knife-edge half loop (up or down), $\frac{3}{4}$ roll down, exit inverted (K4)

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K.25 45° up-line from upright, ¼ roll, knife-edge half loop (up or down), ¾ snap roll down, exit upright (K5)

K.26 45° up-line from upright, ¼ roll, knife-edge half loop (up or down), ¾ snap roll down, exit inverted (K5)

K.27 45° up-line from inverted, ¼ roll, knife-edge half loop (up or down), ¾ snap roll down, exit upright (K5)

K.28 45° up-line from inverted, ¼ roll, knife-edge half loop (up or down), ¾ snap roll down, exit inverted (K5)

K.29 45° up-line from upright, ¾ roll, knife-edge half loop (up or down), ¾ snap roll down, exit upright (K5)

K.30 45° up-line from upright, ¾ roll, knife-edge half loop (up or down), ¾ snap roll down, exit inverted (K5)

K.31 45° up-line from inverted, ¾ roll, knife-edge half loop (up or down), ¾ snap roll down, exit upright (K5)

K.32 45° up-line from inverted, ¾ roll, knife-edge half loop (up or down), ¾ snap roll down, exit inverted (K5)

N.1 Half Square Loop on Corner from upright up with ¼ roll on first leg, ¼ roll on second leg, exit upright (K3)

N.2 Half Square Loop on Corner from upright up with ¼ roll on first leg, ¼ roll on second leg, exit inverted (K3)

N.3 Half Square Loop on Corner from inverted up with ¼ roll on first leg, ¼ roll on second leg, exit upright (K3)

N.4 Half Square Loop on Corner from inverted up with ¼ roll on first leg, ¼ roll on second leg, exit inverted (K3)

N.5 Half Square Loop on Corner from upright down with ¼ roll on first leg, ¼ roll on second leg, exit upright (K3)

N.6 Half Square Loop on Corner from upright down with ¼ roll on first leg, ¼ roll on second leg, exit inverted (K3)

N.7 Half Square Loop on Corner from inverted down with ¼ roll on first leg, ¼ roll on second leg, exit upright (K3)

N.8 Half Square Loop on Corner from inverted down with ¼ roll on first leg, ¼ roll on second leg, exit inverted (K3)

N.9 Half Square Loop on Corner from upright up with snap roll on first leg, snap roll on second leg, exit inverted (K5)

N.10 Half Square Loop on Corner from inverted up with snap roll on first leg, snap roll on second leg, exit upright (K5)

N.11 Half Square Loop on Corner from upright down with snap roll on first leg, snap roll on second leg, exit inverted (K5)

N.12 Half Square Loop on Corner from inverted down with snap roll on first leg, snap roll on second leg, exit upright (K5)

N.13 Half Square Loop on Corner from upright up with 1¼ snap roll on first leg, ¾ roll on second leg, exit upright (K5)

N.14 Half Square Loop on Corner from upright up with 1¼ snap roll on first leg, ¾ roll on second leg, exit inverted (K5)

N.15 Half Square Loop on Corner from inverted up with 1¼ roll on first leg, ¾ roll on second leg, exit upright (K5)

N.16 Half Square Loop on Corner from inverted up with 1¼ roll on first leg, ¾ roll on second leg, exit inverted (K5)

N.17 Half Square Loop on Corner from upright down with 1¼ roll on first leg, ¾ roll on second leg, exit upright (K5)

N.18 Half Square Loop on Corner from upright down with 1¼ roll on first leg, ¾ roll on second leg, exit inverted (K5)

N.19 Half Square Loop on Corner from inverted down with 1¼ roll on first leg, ¾ roll on second leg, exit upright (K5)

N.20 Half Square Loop on Corner from inverted down with 1¼ roll on first leg, ¾ roll on second leg, exit inverted (5)

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N.21 Half Square Loop on Corner from upright up with 1¼ snap roll on first leg, 1¼ snap roll on second leg, exit upright (K5)

N.22 Half Square Loop on Corner from upright up with 1¼ snap roll on first leg, 1¼ snap roll on second leg, exit inverted (K5)

N.23 Half Square Loop on Corner from inverted up with 1¼ roll on first leg, 1¼ snap roll on second leg, exit upright (K5)

N.24 Half Square Loop on Corner from inverted up with 1¼ roll on first leg, 1¼ snap roll on second leg, exit inverted (K5)

N.25 Half Square Loop on Corner from upright down with 1¼ roll on first leg, 1¼ snap roll on second leg, exit upright (K5)

N.26 Half Square Loop on Corner from upright down with 1¼ roll on first leg, 1¼ snap roll on second leg, exit inverted (K5)

N.27 Half Square Loop on Corner from inverted down with 1¼ roll on first leg, 1¼ snap roll on second leg, exit upright (K5)

N.28 Half Square Loop on Corner from inverted down with 1¼ roll on first leg, 1¼ snap roll on second leg, exit inverted (5)

Reason: Increase the difficulty of turnaround manoeuvres by adding higher K-Factor manoeuvres with different manoeuvre elements.