

# Manoeuvre Descriptions for F- Schedule Design Proposals „DRAFT 07“

## Semi-Final and Final Schedule F-13 (2012-2013)

### **F-13.01 Humpty-Bump with $\frac{3}{4}$ roll up, $\frac{1}{2}$ knife-edge loop, $\frac{3}{4}$ roll down**

From upright, pull through a  $\frac{1}{4}$  loop into a vertical upline, perform a  $\frac{3}{4}$  roll, perform a  $\frac{1}{2}$  loop in knife-edge flight into a vertical downline, perform a  $\frac{3}{4}$  roll, push through a  $\frac{1}{4}$  loop, exit inverted.

### **F-13.02 Half Square Loop with consecutive $\frac{1}{2}$ roll, roll in opposite direction**

From inverted, push through a  $\frac{1}{4}$  loop into a vertical upline, perform consecutively a  $\frac{1}{2}$  roll and a roll in opposite direction, pull through a  $\frac{1}{4}$  loop, exit inverted.

### **F-13.03 Loop with consecutive four $\frac{1}{2}$ rolls in opposite directions integrated**

From inverted, pull through a loop while performing consecutively four  $\frac{1}{2}$  rolls in opposite directions, integrated in each  $90^\circ$  of the loop, exit inverted.

### **F-13.04 Figure 6 with stall turn, consecutive two $\frac{1}{4}$ rolls down**

From inverted, pull through a  $\frac{3}{4}$  loop into a vertical upline, perform a stall turn into a vertical downline, perform consecutively two  $\frac{1}{4}$  rolls, pull through a  $\frac{1}{4}$  loop, exit upright.

### **F-13.05 Roll Combination with consecutive $\frac{1}{4}$ roll, two snap rolls in opposite directions, $\frac{1}{4}$ roll**

From inverted, perform consecutively a  $\frac{1}{4}$  roll, a snap roll, another snap roll in opposite direction, and a  $\frac{1}{4}$  roll, exit upright.

### **F-13.06 Shark Fin with roll up, consecutive two $\frac{1}{4}$ rolls down**

From upright, pull through a  $\frac{1}{8}$  loop into a  $45^\circ$  upline, perform a roll, push through a  $\frac{3}{8}$  loop into a vertical downline, perform consecutively two  $\frac{1}{4}$  rolls, pull through a  $\frac{1}{4}$  loop, exit upright.

### **F-13.07 Horizontal Circle 8 with consecutive two rolls**

From upright, perform a  $\frac{1}{4}$  horizontal circle while performing the first  $\frac{1}{4}$  of consecutive two rolls to the outside, then while continuing the rolling ( $\frac{1}{4}$  of the rolls per  $\frac{1}{4}$  of the circles), perform immediately another (full) circle in the opposite direction, then, while continuing the rolling accordingly finish the remaining  $\frac{3}{4}$  of the first circle, exit upright.

### **F-13.08 Pull-Push-Push Humpty-Bump with consecutive four $\frac{1}{4}$ rolls up, roll down**

From upright, pull through a  $\frac{1}{4}$  loop into a vertical upline, perform consecutively four  $\frac{1}{4}$  rolls, push through a  $\frac{1}{2}$  loop into a vertical downline, perform a roll, push through a  $\frac{1}{4}$  loop, exit inverted.

### **F-13.09 $45^\circ$ Upline with consecutive four $\frac{1}{8}$ rolls, 1 $\frac{1}{2}$ snap roll in opposite direction**

From upright, pull through a  $\frac{1}{8}$  loop into a  $45^\circ$  upline, perform consecutively four  $\frac{1}{8}$  rolls, and 1  $\frac{1}{2}$  snap roll in opposite direction, push through a  $\frac{1}{8}$  loop, exit upright.

### **F-13.10 Reverse Top Hat with $\frac{3}{4}$ roll down, $\frac{1}{4}$ rolls up (Option: roll down, consecutive two $\frac{1}{4}$ rolls up)**

From upright, push through a  $\frac{1}{4}$  loop into a vertical downline, perform a  $\frac{3}{4}$  roll, push through a  $\frac{1}{4}$  loop into a horizontal line, push through a  $\frac{1}{4}$  loop into a vertical upline, perform a  $\frac{1}{4}$  roll, push through a  $\frac{1}{4}$  loop, exit upright.

Option: From upright, push through a  $\frac{1}{4}$  loop into a vertical downline, perform a roll, push through a  $\frac{1}{4}$  loop into a horizontal line, push through a  $\frac{1}{4}$  loop into a vertical upline, perform consecutively two  $\frac{1}{4}$  rolls, push through a  $\frac{1}{4}$  loop, exit upright.

### **F-13.11 Clown Dance with $\frac{1}{2}$ loop, inverted spin, 2 $\frac{1}{2}$ turns, consecutive two $\frac{1}{4}$ rolls down**

From upright, pull through a  $\frac{1}{2}$  loop into a horizontal line, perform an inverted spin with 2  $\frac{1}{2}$  turns, perform a vertical downline, perform consecutively two  $\frac{1}{4}$  rolls, pull through a  $\frac{1}{4}$  loop, exit upright.

**F-13.12 Fighter Turn with two 1/4 rolls**

From upright, pull through a 1/8 loop into a 45° upline, perform a 1/4 roll, push through 1/2 circle, to a 45° downline, perform a 1/4 roll, pull through a 1/8 loop, exit upright.

**F-13.13 Knife-Edge Loop with integrated roll on top 90°**

From upright, perform a 1/4 roll, perform a loop in knife-edge flight while performing a roll integrated in the top 90° of the loop, perform a 1/4 roll, exit upright.

**F-13.14 Reverse Cuban 8 with snap roll up**

From upright, pull through a 1/8 loop into a 45° upline, perform a snap roll, push through a 5/8 loop, exit inverted.

**F-13.15 Triangle with consecutive two 1/4 rolls in each line**

From inverted, push through a 3/8 loop into a 45° upline, perform consecutively two 1/4 rolls, pull through a 1/4 loop into a 45° downline, perform consecutively two 1/4 rolls, push through a 3/8 loop into a horizontal line, perform consecutively two 1/4 rolls, exit upright.

**F-13.16 1/2 Loop with roll integrated**

From upright, pull through a 1/2 loop, while performing a roll integrated, exit inverted.

**F-13.17 45° Downline with consecutive two 1/8 roll, roll, two 1/8 roll in opposite directions**

From inverted, pull through a 1/8 loop into a 45° downline, perform consecutively a 1/4 roll, a roll in opposite direction, and another 1/4 roll in opposite direction, pull through a 1/8 loop, exit upright.

**Semi-Final and Final Schedule F-15 (2014-2015)****F-15.01 Double Immelman with 1/2 rolls in both 1/2 loops integrated, two consecutive two 1/4 rolls in opposite direction to integrated rolls.**

From upright, pull through a 1/2 loop while performing a 1/2 roll integrated, immediately followed by consecutive two 1/4 rolls in opposite direction to the integrated roll, perform a horizontal line, pull through a 1/2 loop while performing a 1/2 roll, immediately followed by two consecutive two 1/4 rolls in opposite direction to the integrated roll, exit upright.

**F-15.02 Stall Turn with consecutive three 1/4 rolls up, 1 1/4 snap rolls down**

From upright, pull through a 1/4 loop into a vertical upline, perform consecutively three 1/4 rolls, perform a stall turn into a vertical downline, perform 1 1/4 snap roll, push through a 1/4 loop, exit inverted.

**F-15.03 Golf Ball with two 3/4 roll up, knife-edge loop with snap roll, 3/4 roll down**

From inverted, push through a 1/8 loop into a 45° upline, perform a 3/4 roll, perform a 3/4 loop in knife-edge flight with a snap roll on top into a 45° downline, perform a 3/4 roll, pull through a 1/8 loop, exit upright.

**F-15.04 1/2 Square Loop with consecutive two snap rolls in opposite directions**

From upright, pull through a 1/4 loop into a vertical upline, perform consecutively a snap roll and another snap roll in opposite direction, pull through a 1/4 loop, exit inverted.

**F-15.05 Loop with consecutive two 1/2 rolls in opposite directions integrated**

From inverted, pull through a loop while performing a 1/2 roll integrated in the first 180° of the loop and another 1/2 roll in opposite direction integrated in the second 180° of the loop, exit inverted.

**F-15.06 Inverted Spin with 2 1/2 turns, 1/2 roll down**

From inverted, perform an inverted spin with 2 1/2 turns, perform a vertical downline, perform a 1/2 roll, pull through a 1/4 loop, exit upright.

**F-15.07 Horizontal Triangular Circle with  $\frac{1}{4}$  roll,  $\frac{1}{2}$  outside rolls in each corner integrated**

From upright, perform a  $\frac{1}{4}$  roll in the center, perform a horizontal triangular circle of equal side lengths while performing a  $\frac{1}{2}$  roll to the outside in each corner integrated, perform a  $\frac{1}{4}$  roll in the center, exit upright.

**F-15.08 Top Hat with consecutive two  $\frac{1}{4}$  rolls up, snap roll down (Option: Consecutive three  $\frac{1}{4}$  rolls up, 1  $\frac{1}{4}$  snap roll down)**

From upright, pull through a  $\frac{1}{4}$  loop into a vertical upline, perform consecutively two  $\frac{1}{4}$  rolls, pull through a  $\frac{1}{4}$  loop into a horizontal line, pull through a  $\frac{1}{4}$  loop into a vertical down line, perform a snap roll, pull through a  $\frac{1}{4}$  loop, exit upright.

Option: From upright, pull through a  $\frac{1}{4}$  loop into a vertical upline, perform consecutively three  $\frac{1}{4}$  rolls, pull through a  $\frac{1}{4}$  loop into a horizontal line, pull through a  $\frac{1}{4}$  loop into a vertical down line, perform a 1  $\frac{1}{4}$  snap roll, pull through a  $\frac{1}{4}$  loop, exit upright

**F-15.09 Vertical Cuban 8 with consecutive four  $\frac{1}{8}$  rolls up, consecutive two  $\frac{1}{2}$  rolls down**

From upright, pull through a  $\frac{3}{8}$  loop into a  $45^\circ$  upline, perform consecutively four  $\frac{1}{8}$  rolls, pull through a  $\frac{3}{4}$  loop into a  $45^\circ$  downline, perform consecutively two  $\frac{1}{2}$  rolls, push through a  $\frac{3}{8}$  loop, exit inverted.

**F-15.10  $\frac{1}{2}$  Square Loop on Corner with  $\frac{1}{2}$  roll integrated in  $\frac{1}{4}$  loop**

From inverted, push through a  $\frac{1}{8}$  loop into a  $45^\circ$  upline, push through a  $\frac{1}{4}$  loop into a  $45^\circ$  upline, while performing a  $\frac{1}{2}$  roll integrated in the  $\frac{1}{4}$  loop, pull through a  $\frac{1}{8}$  loop, exit inverted.

**F-15.11 Horizontal Hour-Glass with consecutive two  $\frac{1}{4}$  rolls, two  $\frac{1}{4}$  rolls in opposite direction, consecutive two  $\frac{3}{4}$  rolls in opposite directions**

From inverted, pull through a  $\frac{1}{4}$  loop into a vertical downline, pull through a  $\frac{3}{8}$  loop into a  $45^\circ$  upline, perform consecutively two  $\frac{1}{4}$  rolls and another two  $\frac{1}{4}$  rolls in opposite direction, push through a  $\frac{3}{8}$  loop into a vertical downline, push through a  $\frac{3}{8}$  loop into a  $45^\circ$  upline, perform consecutively a  $\frac{3}{4}$  roll immediately and another  $\frac{3}{4}$  roll in opposite direction, pull through a  $\frac{1}{8}$  loop, exit inverted.

**F-15.12 Half Square Loop with consecutive two  $\frac{1}{2}$  rolls**

From *inverted*, push through a  $\frac{1}{4}$  loop into a vertical downline, perform consecutively two  $\frac{1}{2}$  rolls, pull through a  $\frac{1}{4}$  loop, exit upright.

**F-15.13 Figure 9 with consecutive four  $\frac{1}{4}$  rolls up,  $\frac{3}{4}$  loop with roll integrated in top  $180^\circ$** 

From upright, pull through a  $\frac{1}{4}$  loop into a vertical upline, perform consecutively four  $\frac{1}{4}$  rolls, pull through a  $\frac{3}{4}$  loop while performing a roll integrated in the top  $180^\circ$  of the  $\frac{3}{4}$  loop, exit upright.

**F-15.14 Split S with 1  $\frac{1}{2}$  snap roll**

From *upright*, perform 1  $\frac{1}{2}$  snap roll and immediately pull through a  $\frac{1}{2}$  loop, exit upright

**F-15.15 Roll Combination with consecutive four rolls in opposite directions**

From upright, perform consecutively four rolls in opposite directions, exit upright.

**F-15.16 Pull-Pull-Push Hupty-Bump with two  $\frac{1}{2}$  roll in opposite direction up, roll down**

From upright, pull through a  $\frac{1}{4}$  loop into a vertical upline, perform consecutively two  $\frac{1}{2}$  rolls in opposite direction, pull through a  $\frac{1}{2}$  loop into a vertical downline, perform a roll, push through a  $\frac{1}{4}$  loop, exit inverted.

**F-15.17 Stall Turn with consecutive six  $\frac{1}{8}$  rolls up, 1  $\frac{3}{4}$  snap roll down**

From inverted, push through a  $\frac{1}{4}$  loop into a vertical upline, perform consecutively six  $\frac{1}{8}$  rolls, perform a stall turn into a vertical downline, perform 1  $\frac{3}{4}$  snap roll, pull through a  $\frac{1}{4}$  loop, exit upright.