

P4. LOOP WITH 540*


P6. OVAL WI TH HALF ROLLS AND FLIP


P3. DOUBLE CANDLE WI TH DESCENDING FLIP


P5. UX WI TH PUSHED FLIPS


P7. OPPOSI TE HALF AND FULL


P8. INVERTED UMBRELLA


P9. 180* AUTOROTATI ON


MA takes off vertically from the helipad and ascends to 2 m and hovers for a minimum of 2 seconds, ascends flying backwards describing the upper left (right) quarter of a circle with 5 m radius while simultaneously performing a $180^{\circ}$ pirouette in any direction and stops over flag 1 (2), hovers for a minimum of 2 seconds and then hovers to the other flag 2 (1) while simultaneously performing two $180^{\circ}$ pirouettes that are in opposite direction, stops and hovers over the flag 2 (1) for at least 2 seconds, descends forward describing the upper right (left) quarter of a circle with 5 m radius while simultaneously performing a $180^{\circ}$ pirouette in any direction, stops over the center line for at least 2 seconds, descends and lands into the helipad.

P2: Diamond 4 (UU)
$K=1.5$
MA takes off vertically from the helipad and ascends to 2 m while performing simultaneously a $90^{\circ}$ pirouette in any direction. It hovers there for at least 2 seconds, ascends 2.5 m in a straight line to any flag while performing a $180^{\circ}$ pirouette in any direction and stops for at least 2 seconds. MA ascends 2.5 m in a straight line to 7 m above the center line while performing a $180^{\circ}$ pirouette in any direction and stops for at least 2 seconds. MA descends 2.5 m in a straight line to the second flag while performing a $180^{\circ}$ pirouette in any direction and stops for at least 2 seconds. MA descends 2.5 m in a straight line to 2 m above the center line while performing a $180^{\circ}$ pirouette in any direction and stops for at least 2 seconds. MA descends and lands into the helipad while simultaneously performing a $90^{\circ}$ pirouette in opposite direction of the first pirouette.

## P3: Double candle with descending flip (DD)

MA flies straight and level for a minimum of 10 m and pulls up into a vertical ascent. After a nose up stop MA descends backwards vertically for 2 m minimum performs a half pulled travelling flip, descends vertically for a minimum of 2 m , performs a centered half loop and ascends vertically. After a nose up stop MA descends backwards vertically for 2 m minimum, performs a half pulled travelling flip, descends vertically for 2 m minimum and then pulls into horizontal straight and level flight for a minimum of 10 m .

Note 1: The 2 flips must be made at the same altitude.
Note 2: The bottom of the half loop must be at the same altitude as when entering the figure.

MA flies straight and level for a minimum of 10 m and performs $1 \frac{1}{4}$ loop starting from the center line. When reaching half of the height of the former loop MA performs a $540^{\circ}$ tail turn in any direction followed by a half loop in opposite direction. When reaching again half of the height of the first loop MA performs a second $540^{\circ}$ tail turn in any direction. After MA pulls with quarter loop into horizontal straight and level flight for a minimum of 10 m at the same altitude as when entering the figure.

Note: The tail turns must be executed exactly at half the height of the loop with the MA being precisely vertical.

## P5: UX with Pushed Flips (DD)

$K=1.0$
MA flies straight and level for a minimum of 10 m and pulls up into a $45^{\circ}$ ascent with a centered half roll in any direction. Once the MA has come to a stop, MA performs a $225^{\circ}$ pushed flip, performs a centered 'U', stops, performs a $225^{\circ}$ pushed flip, performs a $45^{\circ}$ descent with a centered half roll in any direction. MA pulls into horizontal straight and level flight for a minimum of 10 m .

Note 1: The bottom of the ' $U$ ' and the rolls must be centered.
Note 2: The bottom of the ' $U$ ' must be at the same altitude as when entering the figure.

## P6: Oval with $1 / 2$ Rolls and Flip (UU)

$K=1.0$
MA flies straight and level for a minimum of 10 m and pulls up into a half loop followed by a half roll in any direction, followed by a travelling $360^{\circ}$ centered pulled flip and followed by a second half roll in any direction. MA then performs a half positive loop and pulls into horizontal straight and level flight for a minimum of 10 m at the same altitude as when entering the figure.

Note 1: If there is a straight line before the first half roll, there must be the same straight line after the second half roll.

Note 2: If there is a straight line after the first half roll, there must be the same straight line before the second half roll.

## P7: Opposite half and full inverted Rolls (DD)

$K=1.0$
MA flies straight and level for a minimum of 10 m and performs a half roll in any direction, flies inverted for a minimum of 1 second, performs a full centered inverted roll in the opposite direction, flies inverted for a minimum of 1 second, performs a half roll in the same direction as the first half roll. MA flies straight and level flight for a minimum of 10 m .

Note 1: The middle of the manoeuvre must be centered.

Note 2: There is one point deduction per inverted flight section that does not last in minimum 1 second.

## P8: Inverted Umbrella (UU)

$K=1.0$
MA flies straight and level for a minimum of 10 m and pulls up into a vertical ascent at center line. After a nose up stop MA performs a half backward loop. After MA stops it performs a centered 'U'. After a nose up stop MA performs a second half backward loop. After a nose down stop MA descends forward vertically on center line followed by a quarter loop and exit after a 10 m straight line at the same altitude as when entering the figure.

Note 1: The quarter loops at the entrance and the exit of the figure and the half loop of the centered „U" must have the same radius.

Note 2: The two half backward loops must be of equal size and must have half radius than the half loop of the centered ' $U$ '.

Note 3: The bottom of the ' $U$ ' must be at the same altitude as when entering the figure

## P9: $180^{\circ}$ Autorotation (DU)

$K=1.0$
MA flies straight and level for a minimum of 10 m at a minimum altitude of 20 m . Manoeuvre begins when model aircraft crosses an imaginary plane that extends vertically upward from a line drawn from the center judge out through the helipad. MA must be in the autorotation state when it cuts this plane, the engine must be off (or at idle) at this point and the MA must be descending. The $180^{\circ}$ turn must start at this point and the turning and descending rate must be constant from this point to a point just before touchdown on the helipad. The flight path of the MA must appear as a semi-circle when viewed from above, starting at the vertical plane and ending at a line drawn from the center judge through the helipad. The MA's flight path must never be parallel to the ground or judge's line.

Scoring criteria for landing: See ANNEX 5E Paragraph 5E.6.11.

