Chief Judge’s Report – the 15th FAI WAAC
Jean Airport, Nevada, USA
October 24th to November 3rd, 2023

Chief Judge: Nick Buckenham (GBR) assisted by Leif Culpin and Jen Buckenham.
Judges: Jerome Houdier (FRA), Galyna Suprunenko (UKR), Steve Todd (GBR),
Violeta Gedminaite (LIT), Eladi Lozano (ESP), Laszlo Liskay (RSA), Edward Waasdorp (NLD),
Peggy Reidinger (USA).

Competitors and Registrations
With over 70 competitors registered for this championship it was bound to be a busy event,
though ultimately just 58 remained at the start to ensure that the judging panel would need
to work very efficiently to ensure the maximum were able to compete. Of those entered six
were H/C pilots, the remainder representing a total of 15 nations from around the world.

Video recordings
The services of an experienced video operator with high quality
equipment was available throughout the championship, and he
quickly became proficient at providing a good standard of
recordings for review by the panel when required. As we had found
at the recent EAC in Italy the need to use these videos to resolve
HZ’s awarded by judges especially for poorly performed flick-rolls
became a frequent occurrence. A suitable video monitor was
available in a slightly darkened tent adjacent to the Chief Judge’s
position, though during the lunch break and after the close of flying
each day our reviews were made in the main briefing tent. Using
these video records we were able to resolve all of the relevant
issues from each performance, though on a couple of occasions competitor’s pre-sequence
warm-up activities were not fully recorded and the suspected non-legal actions had to be
ignored.

The Performance Zone
Two zones were available prior to the event, a training box to the north-west of the airfield
providing a separate area for practice prior to the start of the event as well as the
designated area for the championship some distance to the south-east of the active runway.
Both sites were substantially flat and at the same altitude as the active runway, with only
mildly elevated ground behind the judging position at the east side of the contest box that
we used each morning. The daytime temperature was generally in the 70 to 80°F range (21-
28°C), though this fell extremely rapidly at about 5pm each day before flying stopped due to
imminent sunset at around 5.45. Two days were lost due to high winds, though generally
wind conditions were light – predominantly from the south but occasionally from the north,
enabling two judging locations at the east and west sides of the box to be used throughout.

Warm-Up Pilots
The organisers had secured the services of two experienced warm-up pilots, Craig Gifford
(USA) with his EA-330SC and Martjin Kersten (NED) with a CAP-232. Both flew the box lines
at the Low (200m) and Low-Low (100m) levels when requested and provided high-quality
sequences with intentional ‘errors’ for judges to detect.

Score-sheet transmission to the Scoring Office
Throughout the championship a simple frame and mobile phone arrangement was used to
capture and send photos of all judging sheets to the scoring office, enabling scorer Mary
Beth Rudd to quickly enter the judges’ marks and publish updated results at regular
intervals. This process was however necessarily delayed when the sheets were held pending
HZ resolutions using the video recordings.

Flying standards
The quality of sequence flying was more than usually variable, reflecting the wide range of
pilots and skills that had been able to enter the championship. The results show that
sequence scores below 60% were recorded on 19 occasions during the championship,
possibly an indication of lack of care by their NAC when approving these pilots to enter and
fly at this extremely challenging World class Advanced category aerobatic championship.
Two pilots were excluded following their performances in the Free Known programme, both
assessed by the judging panel and the on-duty jury representative at the judging position as
displaying unsafe and low flying. Two other pilots were disqualified during programme-2 for
practicing at least one figure from their Free Unknown sequence during their warm-up
period, apparently on the advice of their trainer! In general however there was a good deal
of very high quality figure execution and positioning, showing that pilots operating with high
quality modern machinery can, when well trained in this category, achieve a consistently
high standard of aerobatic sequence flying. Rivalry between competitors toward the top of the results in each programme was consistently high and very rewarding to judge.

Quality of Judging

Seven judges and assistants had been selected by the JC for this championship, and an eighth judge and assistant from the US were also present. They all performed to a good standard throughout the event, despite the tricky local conditions at each judging position from the very fine sand and scrub vegetation in the Nevada desert location. The overall analysis below shows a broad range of performances as interpreted by the FairPlay results calculation system, in most cases with low bias and a reasonably well-controlled pattern of grading compared to the overall picture from the panel. The post-flight evaluation of Hard Zeros awarded to flick rolls and spins however once again provided a high proportion of the video assessments.

Nick Buckenham
WAAC-23 Chief Judge

Analysis of Judges Combined Anomalies

<table>
<thead>
<tr>
<th>Sequences</th>
<th>WAAC 2023 Programmes</th>
<th>Free Known</th>
<th>Free Unknown #1 (ADV), Free Unknown #2 (ADV), Free Unknown #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAAC 2023</td>
<td>Jean NV, USA</td>
<td>Oct 24 - Nov 4, 2023</td>
<td>Rgaben Houdu, Kalina, Steve, Lozano, Violeta, Laslo, Edward, Peggy, Roderick</td>
</tr>
<tr>
<td>All Judges</td>
<td>No.</td>
<td>%</td>
<td>FRA, UKR, GBR, ESP, LTU, RSA, NED, USA, USA</td>
</tr>
<tr>
<td>H2 - Hard Zeros</td>
<td>329</td>
<td>1.0</td>
<td>55.2, 1.3, 36.1, 41.1, 29.1, 30.1, 48.1, 55.2</td>
</tr>
<tr>
<td>P2 - Perception Zeros</td>
<td>676</td>
<td>0.0</td>
<td>0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0</td>
</tr>
<tr>
<td>Marks from 0.0 to 6.5</td>
<td>5291</td>
<td>32.4</td>
<td>25.4, 34.3, 20.9, 1065, 40.9, 288, 11.1, 360, 13.8, 459, 19.2, 649, 23.6, 733, 28.2</td>
</tr>
<tr>
<td>Marks from 7.0 to 10.0</td>
<td>15136</td>
<td>72.6</td>
<td>1692, 63.5, 1761, 67.7, 1478, 58.6, 2294, 87.0, 2212, 66.0, 2089, 79.5, 1002, 73.1, 1500, 69.2</td>
</tr>
<tr>
<td>AV - averages</td>
<td>50</td>
<td>0.2</td>
<td>2.0, 1.0, 22.0, 8.0, 3.0, 0.0, 0.0, 1.0, 13.5</td>
</tr>
<tr>
<td>Total marks</td>
<td>20808</td>
<td>1592</td>
<td>20808, 1592, 1592, 1592, 1592, 1592, 1592, 1592</td>
</tr>
</tbody>
</table>

Figure anomalies

| H2 to fitted value | 131 | 131 |
| Mark to confirmed H2 | 105 | 105 |
| P2 to confirmed H2 | 0.0 | 0.0 |
| P2 to fitted value | 0.0 | 0.0 |
| AV to confirmed H2 | 2.0 | 2.0 |
| AV to fitted value | 48  | 48  |
| Lo to fitted value | 225 | 225 |
| Hi to fitted value | 67  | 67  |
| The 60% Rule | 32  | 32  |
| Total figure anomalies | 630 | 630 |
Sequences: Seq01 Programme 1: Free Known, Seq02 Programme 2: Free Unknown #1 (ADV), Seq03 Programme 3: Free Unknown #2 (ADV), Seq04 Programme 4: Free Unknown #3

Sequence anomalies

<table>
<thead>
<tr>
<th>Team</th>
<th>PIs assessed in FPS, pose 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRA Brazil</td>
<td>21 7 Lo 4 Hi - - - - - - - 1 Hi - 1 Hi 2 Lo 1 Hi 2 Lo - - - - 1 Hi 3 Lo -</td>
</tr>
<tr>
<td>CAN Canada</td>
<td>27 6 Lo 9 Hi 1 Lo 2 Hi 1 Lo - - - - 1 Lo - 2 Lo 2 Hi - 1 Hi - - 1 Lo 4 Hi</td>
</tr>
<tr>
<td>FRA France</td>
<td>20 8 Lo 4 Hi - - - - - - - - - - 3 Hi - - 2 Lo - 2 Lo - - 2 Lo -</td>
</tr>
<tr>
<td>GBR Great Britain</td>
<td>4 1 Lo 3 Hi - - - - - - - - - - - - - - - - 3 Hi - 1 Lo -</td>
</tr>
<tr>
<td>GTM Guatemala</td>
<td>3 1 Lo 1 Hi - - - - - - - - - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>IRL Ireland</td>
<td>3 1 Lo 1 Hi - - - - - - - - - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>JPN Japan</td>
<td>6 2 Lo 4 Hi - - - - - - - - - - 1 Lo 1 Hi 1 Lo - 1 Hi - 1 Hi 1 Hi</td>
</tr>
<tr>
<td>LTU Lithuania</td>
<td>4 0 Lo 3 Hi - - - - - - - - - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>ROU Romania</td>
<td>30 7 Lo 6 Hi - - - - - - - - - - 3 Hi - 1 Hi - 1 Lo - 2 Lo 2 Hi 4 Lo -</td>
</tr>
<tr>
<td>RSA South Africa</td>
<td>11 3 Lo 5 Hi - - - - - - - - - - 1 Hi - - - 1 Lo 1 Lo 3 Hi - 1 Hi</td>
</tr>
<tr>
<td>SUI Switzerland</td>
<td>6 2 Lo 3 Hi - - - - - - - - - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>UAE United Arab Emirates</td>
<td>3 2 Lo 2 Hi - - - - - - - - - - 1 Lo - - 1 Lo - - - - - - -</td>
</tr>
<tr>
<td>USA United States</td>
<td>31 6 Lo 14 Hi 1 Lo - - - - - - - - - - 2 Hi - 1 Lo 2 Hi - 2 Hi - 2 Hi</td>
</tr>
<tr>
<td>INT Independent</td>
<td>3 2 Lo 2 Hi - - - - - - - - - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>No Team</td>
<td>7 0 Lo 0 Hi - - - - - - - - - - - - - - - - - - - - - - -</td>
</tr>
<tr>
<td>Total sequence anomalies</td>
<td>55 60 69 Hi 3 Lo 4 Hi 6 Lo 0 Hi 4 Lo 9 Hi 6 Lo 0 Hi 8 Lo 11 Hi 9 Lo 7 Hi 6 Lo 0 Hi 13 Lo 10 Hi</td>
</tr>
</tbody>
</table>

Cumulative RI contributions per Team

**Jerome Houdier (FRA)**

Judge: max country bias = 0.34 min = -0.74

Panel: = 4.53 min = -4.84

**Galina Suprunenko (UKR)**

Judge: max country bias = 1.09 min = -1.74

Panel: = 4.53 min = -4.84

**Steve Todd (GBR)**

Judge: max country bias = 0.64 min = -1.53

Panel: = 4.53 min = -4.84

**Eladi Lozano (ESP)**

Judge: max country bias = 2.21 min = -1.71

Panel: = 4.53 min = -4.84

**Violeta Gedminate (LTU)**

Judge: max country bias = 1.32 min = -2.98

Panel: = 4.53 min = -4.84

**Laszlo LisKay (RSA)**

Judge: max country bias = 1.79 min = -1.75

Panel: = 4.53 min = -4.84

**Edward Waasdorp (NED)**

Judge: max country bias = 3.71 min = -2.73

Panel: = 4.53 min = -4.84

**Peggy Riedinger (USA)**

Judge: max country bias = 4.03 min = -4.84

Panel: = 4.53 min = -4.84

Page 4