

Annex C

Detailed Calculations of Operational Noise Levels

Expansion of Heliport Facilities at Macau Ferry Terminal - Operational Phase Noise Monitoring (Day-time)

Date: 18 August 2009
Time: 16:32 - 18:06
Location: Seaview Commercial Building (roof level)
Weather Condition: Mainly cloudy.

| Flight Ref. No. | Flight Model | Flight Direction * | Approx. Time | Flight Event | Duration of Flight Event, s | Measured Façade Noise Level, dB(A) | | | |
|--|--------------|--------------------|--------------|--------------|-----------------------------|------------------------------------|------|------|-------|
| | | | | | | LAeq | LA10 | LA90 | LAMax |
| <i>(A). Measured Helicopter Noise Data (with background)</i> | | | | | | | | | |
| 1 | AW139 | EW | 16:51 | Approach | 67 | 72 | 72 | 71 | 74 |
| | | - | | Hovering | 28 | 73 | 73 | 72 | 74 |
| | | - | | Idling | 648 | 72 | 73 | 72 | 79 |
| | | EW | 17:03 | Take-off | 62 | 73 | 74 | 73 | 78 |
| 2 | AW139 | WE | 17:18 | Approach | 66 | 75 | 75 | 74 | 80 |
| | | - | | Hovering | 24 | 73 | 73 | 72 | 75 |
| | | - | Idling | 627 | 72 | 73 | 72 | 78 | |
| | | EW | 17:30 | Take-off | 70 | 72 | 72 | 72 | 77 |
| 3 | AW139 | WE | 17:58 | Approach | 73 | 74 | 74 | 73 | 80 |
| | | - | | Hovering | 26 | 76 | 77 | 76 | 80 |
| | | - | Idling | 331 | 72 | 72 | 72 | 76 | |
| | | EW | 18:05 | Take-off | 61 | 73 | 74 | 73 | 78 |

Remark: # Non-project related noise sources, those peak noise levels significantly mask that recorded due to operation of the new heliport
 * EW - Flight direction from East to West; WE - Flight direction from West to East.

(B). Measured Background level, dB(A)

| Corresponding Flight Ref. No. | Background Level, LAeq, dB(A) | Major Noise Sources |
|-------------------------------|-------------------------------|--|
| 1 | 72 | Road traffic noise, and noise due to airplane passing-by, and TurboJet arrival/ departure at HK-Macau Ferry Terminal |
| 2 | 72 | |
| 3 | 72 | |

(C). Calculated Helicopter Noise Level (without background)

| Flight Ref. No. | Flight Model | Flight Direction ## | Approx. Time | Flight Event | Duration of Flight Event, s | LAMax |
|-----------------|--------------|---------------------|--------------|--------------|-----------------------------|-------|
| 1 | AW139 | EW | 16:51 | Approach | 67 | 69 |
| | | - | | Hovering | 28 | 71 |
| | | - | | Idling | 648 | 78 |
| | | EW | 17:03 | Take-off | 62 | 76 |
| 2 | AW139 | WE | 17:18 | Approach | 66 | 79 |
| | | - | | Hovering | 24 | 73 |
| | | - | Idling | 627 | 77 | |
| | | EW | 17:30 | Take-off | 70 | 75 |
| 3 | AW139 | WE | 17:58 | Approach | 73 | 79 |
| | | - | | Hovering | 26 | 79 |
| | | - | Idling | 331 | 73 | |
| | | EW | 18:05 | Take-off | 61 | 77 |

Highest Lmax level, dB(A): 79

Remark: ## EW - Flight direction from East to West; WE - Flight direction from West to East.

Expansion of Heliport Facilities at Macau Ferry Terminal - Operational Phase Noise Monitoring (Evening-time)

Date: 18 August 2009
 Time: 19:00 - 23:00
 Location: Seaview Commercial Building (roof level)
 Weather Condition: Mainly cloudy.

| Flight Ref. No. | Flight Model | Flight Direction * | Approx. Time | Flight Event | Duration of Flight Event, s | Measured Façade Noise Level, dB(A) | | |
|--|--------------|--------------------|--------------|--------------|-----------------------------|------------------------------------|------|------|
| | | | | | | LAeq | LA10 | LA90 |
| (A). Measured Helicopter Noise Data (with background) | | | | | | | | |
| 1 | AW139 | WE | 19:27 | Approach | 78 | 74 | 74 | 74 |
| | | - | | Hovering | 22 | 76 | 76 | 75 |
| | | - | | Idling | 380 | 72 | 72 | 72 |
| | | EW | 19:35 | Take-off | 67 | 72 | 73 | 72 |
| 2 | AW139 | WE | 20:01 | Approach | 67 | 75 | 75 | 74 |
| | | - | | Hovering | 26 | 78 | 78 | 77 |
| | | - | | Idling | 431 | 71 | 72 | 71 |
| | | EW | 20:10 | Take-off | 70 | 71 | 71 | 71 |
| 3 | AW139 | WE | 20:27 | Approach | 66 | 74 | 74 | 73 |
| | | - | | Hovering | 21 | 73 | 73 | 72 |
| | | - | | Idling | 421 | 71 | 71 | 70 |
| | | EW | 20:35 | Take-off | 77 | 73 | 73 | 73 |
| 4 | AW139 | WE | 20:56 | Approach | 69 | 73 | 74 | 73 |
| | | - | | Hovering | 21 | 71 | 71 | 71 |
| | | - | | Idling | 421 | 71 | 72 | 71 |
| | | EW | 21:04 | Take-off | 74 | 71 | 71 | 70 |
| 5 | AW139 | WE | 21:24 | Approach | 81 | 74 | 74 | 73 |
| | | - | | Hovering | 24 | 71 | 72 | 71 |
| | | - | | Idling | 469 | 71 | 71 | 70 |
| | | EW | 21:33 | Take-off | 67 | 71 | 71 | 70 |
| 6 | AW139 | WE | 21:48 | Approach | 77 | 75 | 76 | 74 |
| | | - | | Hovering | 24 | 77 | 78 | 76 |
| | | - | | Idling | 423 | 71 | 71 | 70 |
| | | EW | 21:57 | Take-off | 68 | 71 | 72 | 71 |
| 7 | AW139 | WE | 22:19 | Approach | 72 | 74 | 74 | 73 |
| | | - | | Hovering | 30 | 73 | 73 | 72 |
| | | - | | Idling | 446 | 70 | 70 | 70 |
| | | EW | 22:28 | Take-off | 69 | 72 | 72 | 71 |
| 8 | AW139 | WE | 22:47 | Approach | 77 | 75 | 75 | 74 |
| | | - | | Hovering | 23 | 74 | 75 | 73 |
| | | - | | Idling | 360 | 70 | 70 | 69 |
| | | EW | 22:55 | Take-off | 70 | 70 | 70 | 69 |

Remark: # Non-project related noise sources, those peak noise levels significantly mask that recorded due to operation of the

* EW - Flight direction from East to West; WE - Flight direction from West to East.

(B). Measured Background level, dB(A)

| Corresponding Flight Ref. No. | Background Level, LAeq, dB(A) | Major Noise Sources |
|-------------------------------|-------------------------------|--|
| 1 | 72 | Road traffic noise, and noise due to airplane passing-by, and TurboJet arrival/ departure at HK-Macau Ferry Terminal |
| 2 | 71 | |
| 3 | 70 | |
| 4 | 70 | |
| 5 | 70 | |
| 6 | 70 | |
| 7 | 70 | |
| 8 | 69 | |

(C). Calculated Helicopter Noise Level (without background)

| Flight Ref. No. | Flight Model | Flight Direction ## | Approx. Time | Flight Event | Duration of Flight Event, s | LAeq |
|-----------------|--------------|---------------------|--------------|--------------|-----------------------------|------|
| 1 | AW139 | WE | 19:27 | Approach | 78 | 71 |
| | | | | Hovering | 22 | 74 |
| | | | Idling | 380 | 61 | |
| | | EW | 19:35 | Take-off | 67 | 64 |
| 2 | AW139 | WE | 20:01 | Approach | 67 | 73 |
| | | | | Hovering | 26 | 77 |
| | | | Idling | 431 | 62 | |
| | | EW | 20:10 | Take-off | 70 | 60 |
| 3 | AW139 | WE | 20:27 | Approach | 66 | 71 |
| | | | | Hovering | 21 | 69 |
| | | | Idling | 421 | 62 | |
| | | EW | 20:35 | Take-off | 77 | 70 |
| 4 | AW139 | WE | 20:56 | Approach | 69 | 71 |
| | | | | Hovering | 21 | 65 |
| | | | Idling | 421 | 66 | |
| | | EW | 21:04 | Take-off | 74 | 63 |
| 5 | AW139 | WE | 21:24 | Approach | 81 | 72 |
| | | | | Hovering | 24 | 65 |
| | | | Idling | 469 | 62 | |
| | | EW | 21:33 | Take-off | 67 | 62 |
| 6 | AW139 | WE | 21:48 | Approach | 77 | 73 |
| | | | | Hovering | 24 | 76 |
| | | | Idling | 423 | 59 | |
| | | EW | 21:57 | Take-off | 68 | 64 |
| 7 | AW139 | WE | 22:19 | Approach | 72 | 71 |
| | | | | Hovering | 30 | 69 |
| | | | Idling | 446 | 54 | |
| | | EW | 22:28 | Take-off | 69 | 67 |
| 8 | AW139 | WE | 22:47 | Approach | 77 | 73 |
| | | | | Hovering | 23 | 72 |
| | | | Idling | 360 | 60 | |
| | | EW | 22:55 | Take-off | 70 | 53 |

Average Noise Level (4 hrs), dB(A): 61

Remark: ## EW - Flight direction from East to West; WE - Flight direction from West to East.

Expansion of Heliport Facilities at Macau Ferry Terminal - Operational Phase Noise Monitoring (Day-time)

Date: 19 August 2009
Time: 17:04 - 19:00
Location: Wayson Commercial Building (roof level)
Weather Condition: Cloudy.

| Flight Ref. No. | Flight Model | Flight Direction * | Approx. Time | Flight Event | Duration of Flight Event, s | Measured Façade Noise Level, dB(A) | | | |
|--|--------------|--------------------|--------------|--------------|-----------------------------|------------------------------------|------|------|-------|
| | | | | | | LAeq | LA10 | LA90 | LAMax |
| (A). Measured Helicopter Noise Data (with background) | | | | | | | | | |
| 1 | AW139 | WE | 17:20 | Approach | 62 | 75 | 76 | 75 | 81 |
| | | - | | Hovering | 21 | 76 | 76 | 75 | 81 |
| | | - | | Idling | 614 | 73 | 73 | 73 | 82 |
| | | EW | 17:32 | Take-off | 69 | 74 | 74 | 73 | 77 |
| 2 | AW139 | WE | 18:06 | Approach | 59 | 76 | 76 | 75 | 84 |
| | | - | | Hovering | 22 | 74 | 74 | 74 | 77 |
| | | - | | Idling | 240 | 73 | 73 | 72 | 78 |
| | | EW | 18:11 | Take-off | 71 | 73 | 73 | 72 | 77 |
| 3 | AW139 | WE | 18:56 | Approach | 72 | 74 | 75 | 74 | 79 |
| | | - | | Hovering | 21 | 76 | 76 | 75 | 81 |
| | | - | | Idling @ | 132 | 72 | 72 | 72 | 78 |
| | | EW | | Take-off @ | - | - | - | - | - |

Remark: # Non-project related noise sources, those peak noise levels significantly mask that recorded due to operation of the new helipad.

* EW - Flight direction from East to West; WE - Flight direction from West to East.

@ As a portion of the **Idling** mode and the whole duration of **Take-off** mode of the concerned flight happened after the day-time noise measurement period (i.e. 07:00 to 19:00), only recorded noise levels that are within the day time noise measurement period are presented in the above table.

(B). Measured Background level, dB(A)

| Corresponding Flight Ref. No. | Background Level, LAeq, dB(A) | Major Noise Sources |
|-------------------------------|-------------------------------|---|
| 1 | 73 | Road traffic noise, and noise due to airplane passing-by and TurboJet arrival/ departure at HK-Macau Ferry Terminal |
| 2 | 72 | |
| 3 | 72 | |

(C). Calculated Helicopter Noise Level (without background)

| Flight Ref. No. | Flight Model | Flight Direction ## | Approx. Time | Flight Event | Duration of Flight Event, s | LAMax |
|-----------------|--------------|---------------------|--------------|--------------|-----------------------------|-------|
| 1 | AW139 | WE | 17:20 | Approach | 62 | 80 |
| | | - | | Hovering | 21 | 80 |
| | | - | | Idling | 614 | 81 |
| | | EW | 17:32 | Take-off | 69 | 75 |
| 2 | AW139 | WE | 18:06 | Approach | 59 | 83 |
| | | - | | Hovering | 22 | 75 |
| | | - | | Idling | 240 | 76 |
| | | EW | 18:11 | Take-off | 71 | 75 |
| 3 | AW139 | WE | 18:56 | Approach | 72 | 78 |
| | | - | | Hovering | 21 | 80 |
| | | - | | Idling @ | 132 | 77 |
| | | EW | | Take-off @ | - | - |

Highest Lmax level, dB(A): **83**

Remark: ## EW - Flight direction from East to West; WE - Flight direction from West to East.

@ As a portion of the **Idling** mode and the whole duration of **Take-off** mode of the concerned flight happened after the day-time noise measurement period (i.e. 07:00 to 19:00), only recorded noise levels that are within the day time noise measurement period are presented in the above table.

Expansion of Heliport Facilities at Macau Ferry Terminal - Operational Phase Noise Monitoring (Evening-time)

Date: 17 August 2009
Time: 19:00 - 23:00
Location: Wayson Commercial Building (roof level)
Weather Condition: Mainly cloudy

| Flight Ref. No. | Flight Model | Flight Direction * | Approx. Time | Flight Event | Duration of Flight Event, s | Measured Façade Noise Level, dB(A) | | |
|--|--------------|--------------------|--------------|--------------|-----------------------------|------------------------------------|------|------|
| | | | | | | LAeq | LA10 | LA90 |
| <i>(A). Measured Helicopter Noise Data (with background)</i> | | | | | | | | |
| 1 | AW139 | - | 19:04 | Approach ** | | | | |
| | | - | | Hovering ** | | | | |
| | | - | | Idling | 565 | 73 | 73 | 72 |
| | | EW | | Take-off | 86 | 73 | 73 | 72 |
| 2 | AW139 | WE | 19:27 | Approach | 70 | 74 | 75 | 74 |
| | | - | | Hovering | 30 | 75 | 75 | 74 |
| | | - | 19:42 | Idling | 799 | 72 | 72 | 71 |
| | | EW | | Take-off | 79 | 72 | 73 | 72 |
| 3 | AW139 | WE | 19:57 | Approach | 75 | 73 | 73 | 72 |
| | | - | | Hovering | 24 | 75 | 76 | 75 |
| | | - | 20:05 | Idling | 428 | 71 | 71 | 70 |
| | | EW | | Take-off | 75 | 72 | 72 | 71 |
| 4 | AW139 | WE | 20:32 | Approach | 72 | 74 | 75 | 74 |
| | | - | | Hovering | 22 | 76 | 77 | 75 |
| | | - | 20:40 | Idling | 398 | 71 | 71 | 70 |
| | | EW | | Take-off | 75 | 70 | 70 | 69 |
| 5 | AW139 | WE | 20:55 | Approach | 74 | 73 | 74 | 73 |
| | | - | | Hovering | 34 | 74 | 74 | 73 |
| | | - | 21:05 | Idling | 461 | 70 | 71 | 70 |
| | | EW | | Take-off | 69 | 71 | 71 | 70 |
| 6 | AW139 | WE | 21:59 | Approach | 75 | 73 | 74 | 72 |
| | | - | | Hovering | 23 | 74 | 75 | 73 |
| | | - | 22:06 | Idling | 380 | 70 | 70 | 69 |
| | | EW | | Take-off | 81 | 70 | 70 | 69 |
| 7 | AW139 | WE | 22:20 | Approach | 77 | 73 | 73 | 72 |
| | | - | | Hovering | 23 | 75 | 75 | 74 |
| | | - | 22:29 | Idling | 423 | 70 | 71 | 70 |
| | | EW | | Take-off | 78 | 70 | 70 | 70 |
| 8 | AW139 | WE | 22:49 | Approach | 69 | 73 | 74 | 72 |
| | | - | | Hovering | 33 | 73 | 74 | 73 |
| | | - | 22:56 | Idling | 355 | 70 | 71 | 70 |
| | | EW | | Take-off | 79 | 71 | 71 | 70 |

Remark: # Non-project related noise sources, those peak noise levels significantly mask that recorded due to operation of the new helipad.
 * EW - Flight direction from East to West; WE - Flight direction from West to East.
 ** Noise measurement was commenced at 19:00. Thus, noise data before this time is not available.

(B). Measured Background level, dB(A)

| Corresponding Flight Ref. No. | Background Level, LAeq, dB(A) | Major Noise Sources |
|-------------------------------|-------------------------------|--|
| 1 * | 70 | Road traffic noise, and noise due to airplane passing-by, and TurboJet arrival/ departure at HK-Macau Ferry Terminal |
| 2 | 70 | |
| 3 | 70 | |
| 4 | 70 | |
| 5 | 69 | |
| 6 | 69 | |
| 7 | 69 | |
| 8 | 70 | |

Remark: * Based on background noise level recorded before the second flight.

(C). Calculated Helicopter Noise Level (without background)

| Flight Ref. No. | Flight Model | Flight Direction ## | Approx. Time | Flight Event | Duration of Flight Event, s | LAeq |
|-----------------|--------------|---------------------|--------------|--------------|-----------------------------|------|
| 1 | AW139 | - | 19:04 | Approach ** | | |
| | | | | Hovering ** | | |
| | | | | Idling | 565 | 69 |
| | | EW | | Take-off | 86 | 69 |
| 2 | AW139 | WE | 19:27 | Approach | 70 | 72 |
| | | | | Hovering | 30 | 73 |
| | | | | Idling | 799 | 66 |
| | | EW | 19:42 | Take-off | 79 | 68 |
| 3 | AW139 | WE | 19:57 | Approach | 75 | 70 |
| | | | | Hovering | 24 | 74 |
| | | | | Idling | 428 | 62 |
| | | EW | 20:05 | Take-off | 75 | 67 |
| 4 | AW139 | WE | 20:32 | Approach | 72 | 72 |
| | | | | Hovering | 22 | 75 |
| | | | | Idling | 398 | 63 |
| | | EW | 20:40 | Take-off | 75 | 53 |
| 5 | AW139 | WE | 20:55 | Approach | 74 | 71 |
| | | | | Hovering | 34 | 72 |
| | | | | Idling | 461 | 65 |
| | | EW | 21:05 | Take-off | 69 | 66 |
| 6 | AW139 | WE | 21:59 | Approach | 75 | 71 |
| | | | | Hovering | 23 | 72 |
| | | | | Idling | 380 | 64 |
| | | EW | 22:06 | Take-off | 81 | 62 |
| 7 | AW139 | WE | 22:20 | Approach | 77 | 71 |
| | | | | Hovering | 23 | 73 |
| | | | | Idling | 423 | 64 |
| | | EW | 22:29 | Take-off | 78 | 64 |
| 8 | AW139 | WE | 22:49 | Approach | 69 | 70 |
| | | | | Hovering | 33 | 71 |
| | | | | Idling | 355 | 60 |
| | | EW | 22:56 | Take-off | 79 | 64 |

Average Noise Level (4 hrs), dB(A): 62

Remark: ## EW - Flight direction from East to West; WE - Flight direction from West to East.

** Noise measurement was commenced at 19:00. Thus, noise data before this time is not available.

Expansion of Heliport Facilities at Macau Ferry Terminal - Operational Phase Noise Monitoring (Day-time)

Date: 19 August 2009
Time: 15:33 - 16:34
Location: Wing On Centre (roof level)
Weather Condition: Cloudy.

| Flight Ref. No. | Flight Model | Flight Direction * | Approx. Time | Flight Event | Duration of Flight Event, s | Measured Façade Noise Level, dB(A) | | | |
|--|--------------|--------------------|--------------|--------------|-----------------------------|------------------------------------|------|------|-------|
| | | | | | | LAeq | LA10 | LA90 | LAMax |
| (A). Measured Helicopter Noise Data (with background) | | | | | | | | | |
| 1 | AW139 | WE | 15:44 | Approach | 64 | 68 | 68 | 68 | 72 |
| | | - | | Hovering | 20 | 71 | 72 | 71 | 75 |
| | | - | | Idling | 672 | 68 | 68 | 67 | 76 |
| | | EW | 15:57 | Take-off | 61 | 68 | 69 | 68 | 73 |
| 2 | AW139 | WE | 16:20 | Approach | 65 | 72 | 73 | 72 | 78 |
| | | - | | Hovering | 25 | 72 | 72 | 71 | 76 |
| | | - | | Idling | 720 | 68 | 69 | 68 | 74 |
| | | EW | 16:34 | Take-off | 58 | 73 | 73 | 72 | 80 |

Remark: # Non-project related noise sources, those peak noise levels significantly mask that recorded due to operation of the new helipad.

* EW - Flight direction from East to West; WE - Flight direction from West to East.

(B). Measured Background level, dB(A)

| Corresponding Flight Ref. No. | Background Level, LAeq, dB(A) | Major Noise Sources |
|-------------------------------|-------------------------------|--|
| 1 | 67 | Road traffic noise, and noise due to airplane passing-by, and TurboJet arrival/ departure at HK-Macau Ferry Terminal |
| 2 | 68 | |

(C). Calculated Helicopter Noise Level (without background)

| Flight Ref. No. | Flight Model | Flight Direction ## | Approx. Time | Flight Event | Duration of Flight Event, s | LAMax |
|-----------------|--------------|---------------------|--------------|--------------|-----------------------------|-------|
| 1 | AW139 | WE | 15:44 | Approach | 64 | 70 |
| | | - | | Hovering | 20 | 74 |
| | | - | | Idling | 672 | 76 |
| | | EW | 15:57 | Take-off | 61 | 72 |
| 2 | AW139 | WE | 16:20 | Approach | 65 | 77 |
| | | - | | Hovering | 25 | 75 |
| | | - | | Idling | 720 | 73 |
| | | EW | 16:34 | Take-off | 58 | 79 |

Highest Lmax level, dB(A): **79**

Remark: ## EW - Flight direction from East to West; WE - Flight direction from West to East.

Expansion of Heliport Facilities at Macau Ferry Terminal - Operational Phase Noise Monitoring (Evening-time)

Date: 17 August 2009
Time: 19:00 - 23:00
Location: Wing On Centre (roof level)
Weather Condition: Mainly cloudy

| Flight Ref. No. | Flight Model | Flight Direction * | Approx. Time | Flight Event | Duration of Flight Event, s | Measured Façade Noise Level, dB(A) | | |
|--|--------------|--------------------|--------------|--------------|-----------------------------|------------------------------------|------|------|
| | | | | | | LAeq | LA10 | LA90 |
| <i>(A). Measured Helicopter Noise Data (with background)</i> | | | | | | | | |
| 1 | AW139 | - | 19:04 | Approach ** | | | | |
| | | - | | Hovering ** | | | | |
| | | - | | Idling | 565 | 69 | 69 | 68 |
| | | EW | | Take-off | 86 | 72 | 73 | 72 |
| 2 | AW139 | WE | 19:27 | Approach | 70 | 70 | 70 | 69 |
| | | - | | Hovering | 30 | 71 | 72 | 71 |
| | | - | 19:42 | Idling | 799 | 69 | 69 | 68 |
| | | EW | | Take-off | 79 | 72 | 72 | 71 |
| 3 | AW139 | WE | 19:57 | Approach | 75 | 68 | 68 | 67 |
| | | - | | Hovering | 24 | 71 | 72 | 71 |
| | | - | 20:05 | Idling | 428 | 68 | 68 | 68 |
| | | EW | | Take-off | 75 | 72 | 72 | 71 |
| 4 | AW139 | WE | 20:32 | Approach | 72 | 68 | 68 | 67 |
| | | - | | Hovering | 22 | 71 | 71 | 71 |
| | | - | 20:40 | Idling | 398 | 69 | 69 | 68 |
| | | EW | | Take-off | 75 | 71 | 71 | 70 |
| 5 | AW139 | WE | 20:55 | Approach | 74 | 67 | 67 | 66 |
| | | - | | Hovering | 34 | 71 | 71 | 70 |
| | | - | 21:05 | Idling | 461 | 68 | 68 | 67 |
| | | EW | | Take-off | 69 | 70 | 71 | 70 |
| 6 | AW139 | WE | 21:59 | Approach | 75 | 67 | 67 | 67 |
| | | - | | Hovering | 23 | 72 | 72 | 71 |
| | | - | 22:06 | Idling | 380 | 68 | 68 | 68 |
| | | EW | | Take-off | 81 | 72 | 72 | 71 |
| 7 | AW139 | WE | 22:20 | Approach | 77 | 68 | 68 | 67 |
| | | - | | Hovering | 23 | 72 | 72 | 71 |
| | | - | 22:29 | Idling | 423 | 68 | 68 | 67 |
| | | EW | | Take-off | 78 | 72 | 72 | 71 |
| 8 | AW139 | WE | 22:49 | Approach | 69 | 67 | 67 | 66 |
| | | - | | Hovering | 33 | 70 | 71 | 70 |
| | | - | 22:56 | Idling | 355 | 67 | 67 | 67 |
| | | EW | | Take-off | 79 | 70 | 71 | 70 |

Remark: # Non-project related noise sources, those peak noise levels significantly mask that recorded due to operation of the new helipad.
 * EW - Flight direction from East to West; WE - Flight direction from West to East.
 ** Noise measurement was commenced at 19:00. Thus, noise data before this time is not available.

(B). Measured Background level, dB(A)

| Corresponding Flight Ref. No. | Background Level, LAeq, dB(A) | Major Noise Sources |
|-------------------------------|-------------------------------|--|
| 1 * | 67 | Road traffic noise, and noise due to airplane passing-by, and TurboJet arrival/ departure at HK-Macau Ferry Terminal |
| 2 | 67 | |
| 3 | 67 | |
| 4 | 67 | |
| 5 | 66 | |
| 6 | 66 | |
| 7 | 66 | |
| 8 | 66 | |

Remark: * Based on background noise level recorded before the second flight.

(C). Calculated Helicopter Noise Level (without background)

| Flight Ref. No. | Flight Model | Flight Direction ## | Approx. Time | Flight Event | Duration of Flight Event, s | LAeq |
|-----------------|--------------|---------------------|--------------|--------------|-----------------------------|------|
| 1 | AW139 | - | 19:04 | Approach ** | | |
| | | | | Hovering ** | | |
| | | | | Idling | 565 | 64 |
| | | EW | | Take-off | 86 | 71 |
| 2 | AW139 | WE | 19:27 | Approach | 70 | 65 |
| | | | | Hovering | 30 | 69 |
| | | | | Idling | 799 | 63 |
| | | EW | 19:42 | Take-off | 79 | 70 |
| 3 | AW139 | WE | 19:57 | Approach | 75 | 60 |
| | | | | Hovering | 24 | 69 |
| | | | | Idling | 428 | 61 |
| | | EW | 20:05 | Take-off | 75 | 70 |
| 4 | AW139 | WE | 20:32 | Approach | 72 | 61 |
| | | | | Hovering | 22 | 69 |
| | | | | Idling | 398 | 65 |
| | | EW | 20:40 | Take-off | 75 | 68 |
| 5 | AW139 | WE | 20:55 | Approach | 74 | 60 |
| | | | | Hovering | 34 | 69 |
| | | | | Idling | 461 | 63 |
| | | EW | 21:05 | Take-off | 69 | 68 |
| 6 | AW139 | WE | 21:59 | Approach | 75 | 61 |
| | | | | Hovering | 23 | 70 |
| | | | | Idling | 380 | 64 |
| | | EW | 22:06 | Take-off | 81 | 70 |
| 7 | AW139 | WE | 22:20 | Approach | 77 | 63 |
| | | | | Hovering | 23 | 70 |
| | | | | Idling | 423 | 63 |
| | | EW | 22:29 | Take-off | 78 | 70 |
| 8 | AW139 | WE | 22:49 | Approach | 69 | 60 |
| | | | | Hovering | 33 | 69 |
| | | | | Idling | 355 | 62 |
| | | EW | 22:56 | Take-off | 79 | 68 |

Average Noise Level (4 hrs), dB(A): 60

Remark: ## EW - Flight direction from East to West; WE - Flight direction from West to East.

** Noise measurement was commenced at 19:00. Thus, noise data before this time is not available.