PRE-AFT BRIEFING

1. **Purpose:** Airworthiness Flight Test Renewal of C of A B-6550

2. **Objective:**
   - Safe, effective and efficient completion of AFT
   - Accurate completion and submission of relevant documentation

3. **Roles, duties and responsibilities:**

<table>
<thead>
<tr>
<th>IL</th>
<th>PL</th>
<th>NW</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIC</td>
<td>SIC</td>
<td>OBSERVER</td>
</tr>
<tr>
<td>PF</td>
<td>PM</td>
<td>SAFETY PILOT</td>
</tr>
<tr>
<td>LHS</td>
<td>RHS</td>
<td>JUMP SEAT</td>
</tr>
<tr>
<td>(HKCAD)</td>
<td></td>
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</tr>
</tbody>
</table>

4. **Successful outcome:**
   - Everyone on same page
   - Coordination between us
   - Coordination between us and ATC
ROUTE:  VHHH - VHHH
       HK TMA

CONDITIONS:

Day/VMC
TOGW:  75,000 - 76,000 Lbs
T.O. FUEL:  27,000 Lbs

HK BAC  0530 L
ETD    0730 L/2130 Z
ETE    02:30

Passports  HKCAD Pilot Licenses/Medicals
Smart Casual  ARA/TRA Permits

Schedule/Tasks:

21 ITEMS < 5 ground
< 16 airborne
NOTES:

1. Coordinate with CAMO, COC and DFO
2. Ensure validity of HKCAD AFT Letter
3. Coordinate with ATC Manager 2-3 hours before departure
4. Three copies of current schedule
5. Crew Licences/Medicals/AFT Approval Letter
6. Flight Plan/Weather/NOTAMs
7. Advise ATC that can accept RN, as necessary
8. Request block altitudes, as necessary
9. Monitor dist/fuel/ATIS
10. Coordination/confirmation < moving switches

ATC Watch Manager +852 2910 6821
2910 6819
Profiles 5-14

5. Takeoff
6. Eng accelerations - 4,000'
7. Climb 1 @ \( \sqrt{2} \) - 4,000' to 10,000'
8. Cowl/wing anti-icing - climbing to 17,000'
9. Pressurization and ram air - 17,000'

10. Climb 2 @ VSE - 15,000' to 20,000'
11. Climb to FL390
12. Windshield heat - FL390
13. Pressurization - FL390
14. APU start - FL390
15 High Mach Run - FL390 to FL370
16 High KIAS Run - FL230 to FL120
17 Stalling Test - 10,000'
18 Spoiler Blowdown - 8,000'
19 Landing Gear/Flap Operation - 8,000'
20 Landing
1. **Initial Checks**

   - **Standby Rudder** ✓
   - Gear Pins in / Observer outside
   - Batts on / Stby Rudder on
   - CWow CB (POP/C2) pulled
   - Rudder L/R ✓

   **Nose Wheel Steering (NWS)** ✓

   - CWow CB Reset
   - NWS Switch on
   - Tiller L/R ✓

2. **Pre-flight Checks**

   - Configuration Warnings ✓

   - APU GEN on

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**Aircraft Configuration**

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**Note 1:** Gust lock off prior to checks

**Note 2:** Verify area clear before extending flaps!
③ AFTER ENGINE START CHECKS

– RH ENG START – PTU ✓
– LH ENG START – PTU ✓

– ELEV Disconnect ✓
– AILR Disconnect ✓

– TRIMS ✓
– STALL BARRIER ✓
– EMER STAB ✓

④ TAXI CHECKS

– EMER BRAKE (ANTI-SKID off)
– T/REV MANUAL STOW ✓
– Pedal disconnect ✓

NOTE 3: CONDUCT ✓ BEFORE STARTING ENG ✓-list
NOTE 4: CONDUCT ✓ ON TAXIWAY BEFORE TAXI ✓-list
Pull EMER BRAKE GENTLY!
5. **Takeoff**

RATED EPR
APU ON
SEMI - 8,000'

6. **Engine Accelerations**

4,000' MSL
150 KCAS
GEAR DOWN
FLAPS 39'
**Time:** Idle to T.O./GA EPR (MAX 8 SECS) EACH ENGINE
Climb 1 @ V2

Configuration:

ENG SYN Off
Flaps 20°
Gear UP
L ENG – TOGA
R ENG – IDLE
Pressurization ON
Anti-ice Off
LH Altimeter - 1013
Constant heading

* Open X-flow valve

Block ALT: 4,000-10,000'

5 minute climb @ V2

4,000' MSL
### Dry Runway Takeoff Planning Tables: Flaps 20°, Engine Bleeds ON, ctd...

#### AFM APP. A

#### DRY RUNWAY TAKEOFF PLANNING CHART

<table>
<thead>
<tr>
<th>ENGINE BLEEDS ON</th>
<th>AIRPORT PRESSURE ALTITUDE = 4,000 FEET</th>
<th>TAKEOFF FLAP 20°</th>
</tr>
</thead>
<tbody>
<tr>
<td>91,000 LB MTOW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OAT (°C)</td>
<td>45 40 35 30 25 20 15 10 5 -5 -15</td>
<td></td>
</tr>
<tr>
<td>OAT (°F)</td>
<td>113 104 95 86 77 68 59 50 41 23 5</td>
<td></td>
</tr>
<tr>
<td>RATED EPR</td>
<td>1.46 1.49 1.52 1.55 1.61 1.61 1.61 1.61 1.61 1.61 1.60</td>
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</tr>
<tr>
<td><strong>91,000 LB</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V_{ref} = 196 KCAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V_{ref} = 157 KCAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAX TEMP = 39°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>90,000 LB</strong></td>
<td></td>
<td></td>
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<tr>
<td>V_{ref} = 195 KCAS</td>
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<td>V_{ref} = 156 KCAS</td>
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<td>MAX TEMP = 36°C</td>
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<td><strong>85,000 LB</strong></td>
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<td>V_{ref} = 188 KCAS</td>
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<td>V_{ref} = 150 KCAS</td>
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<td><strong>80,000 LB</strong></td>
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<td>V_{ref} = 138 KCAS</td>
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<td><strong>70,000 LB</strong></td>
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<td>V_{ref} = 159 KCAS</td>
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<td><strong>60,000 LB</strong></td>
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<td>V_{ref} = 152 KCAS</td>
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<td>MAX TEMP = 47°C</td>
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<tr>
<td><strong>55,000 LB</strong></td>
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<td>V_{ref} = 145 KCAS</td>
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<td>V_{ref} = 114 KCAS</td>
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<tr>
<td><strong>50,000 LB</strong></td>
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<td>V_{ref} = 139 KCAS</td>
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<td>V_{ref} = 110 KCAS</td>
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<tr>
<td>MAX TEMP = 47°C</td>
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</tbody>
</table>

#### CAUTION:

FOR ACCELERATION TO TAKEOFF WITH CROSSWINDS ABOVE 20 KNOTS, THE FAN SPEED IS LIMITED TO LESS THAN 96% LP RPM UNTIL A FORWARD SPEED OF 20 KNOTS HAS BEEN REACHED. ABOVE 20 KNOTS FORWARD SPEED, A SLAM ACCELERATION TO TAKEOFF POWER IS REQUIRED. ADD 600 FEET TO REQUIRED FIELD LENGTH WHEN USING THIS PROCEDURE.

#### NOTES:

1. Increase available field length 2% for each 5 knots of headwind (up to 40 knots).
2. Decrease available field length 18% for each 1° of uphill slope (up to 2%).
3. Decrease available field length 1100 feet if ground spoilers are inoperative.
4. Data is valid for engine bleeds ON.

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**REVISION 40**  
**PERFORMANCE**  
March 15/16  
Page PA - 18
8 Cowl/Wing Anti Ice

L-R Cowl A/I ON - PRESSURE ✓
L-R Wing A/I ON - TEMPERATURE ✓

9 Pressurization and Ram Air

17,000'/250 KTS
O2/Mic ✓

Semi/Landing/15,000'/+2,500 fps
Cabin Pressure Low @ 14,500'
PAX O2 Mask Deployed @ 14,750' ± 250'
Auto/Flight
Ram Air ✓
**Configuration:**

- APU ON
- ENG SYN Off
- Flaps Up
- Gear Up
- L ENG - IDLE
- R ENG - MCT
- Air Conditioning - L Bleed/Pack Off
- Anti-ice Off
- LH Altimeter - 1013
- L GEN Off
- Constant Heading
- Open X-flow Valve

Block Alt: 15,000' - 20,000'

5 minute climb @ VSE

15,000' MSL
ENROUTE CLimb SPEED
FLAPS 0°
EFFECTIVE FOR ALL AMBIENT TEMPERATURES

Figure 1. G550 Enroute Climb Speed, Flaps 0°
11 CLIMB TO FL390

Flight Controls ✓
Trims ✓
Emer Stab ✓
Yaw Damper (FGC 1 & 2) ✓

12 WINDSHIELD HEAT - FL390

Cabin Window Heat ✓ No CAS Messages

13 PRESSURIZATION - FL390

Auto/Flight ◢ ◢ psi ✓
Manual/Cabin Altitude - decrease 1000 FPM
CPRV opens ◢ ◢ psi ✓
Return to Auto

14 APU START - FL390

APU Relight ◢ ◢ MO. 80 ✓
Shut down APU
LEVEL flight, M0.80, Trimmed
INCREASE speed slowly to M0.90 in shallow dive

Trim @ M0.80 — ?
IMN @ MachTrim operation — ?
OVERSPEED aural WARNING P1 — P2 — ?
INITIATE recovery at M0.90

Block 39,000' - 32,000'

FL390 M0.80

M0.90

FL320
INCREASE SPEED TO 350 KTS
RECOVER USING SPEED BRAKES

KCAS @ WARNING P1 ___ and P2 ___?
Flight Controls ✓
Airframe Behavior ✓
Speed Brake Operation ✓
Engine Behavior w/Throttles Closed ✓
Initiate Recovery AT 350 KCAS
"STALL WARNING"

Stall 1: Flaps 0°, level flight
Stall 2: Flaps 30°, 600-800 fpm descent

SPOILER BLOWDOWN

- 250 kts, speed brakes extended, SPLR control off
- 170, flaps 20°, gear down:
  - AIRCRAFT CONFIGURATION
    - SPEED BRAKE EXTENDED
  - SPD BRAKE RETRACTED, SPLR CONTROL ON
  - ACCELERATE AND RECONFIGURE

LANDING GEAR/FLAP OPERATION

- Flaps to 10° ______ @ 250 kts
- Gear down ______ @ 225 kts
- Gear up ________ @ 225 kts
- Flaps 10°-20°______ @ 220 kts
- Flaps 20°-30°______ @ 170 kts
CONFIRM GEAR WARNING CANNOT BE SILENCED?

EXTEND SPD BRAKE AND CONFIRM:

**AIRCRAFT CONFIGURATION**

- Flaps 39° to 20° @ 170 KTS
- Flaps 20° to 10° @ 220 KTS
- Flaps 10° to UP @ 250 KTS

**20）LANDING**

NORMAL LANDING
MAX THRUST REVERSER - LP RPM 70% ± 2%?

**21）POST-FLIGHT**

EMER PWK ✓

EMERGENCY LIGHTS

- CABIN
- OVERWING (6)
- UNDERWING (2)
Upon completion of AFT:

1. Crew de-brief
2. Notify DFO
3. Notify CAMO
4. Submit completed AFTS to CAMO and confirm receipt