Briefing
- the Cheonan Situation -
Ambassador Han, Duk-soo
Background

- Apparent Explosion cause ROKS “Cheonan” to break apart and sink
  - March 26, 2010, app. 21:22
  - 1 mile SW of Baengnyeong Island
  - Stern sank few min. later, bow 3 hrs. later
  - 104 crew / 46 dead or missing
Background

• Joint Civ.-Mil Investigation Team (JIG)
  – 74 Civ. & Mil experts
  – ROK, US, Aust., UK, Sweden
• Investigation results announced: May 20
• President Lee’s address: May 24
Issues and Findings

- **Cause of incident**
  - External explosion
  - Torpedo
  - NK made

- **Responsibility**
  - Torpedo fired by a NK submarine
Cause of Incident

(1) External Explosion
(2) Torpedo explosion
(3) NK manufactured
Cause of Incident

(1) External Explosion : JIG conclusion

- Underwater explosion outside the ship
- Bottom left(port) side of the gas turbine room
- Explosion direction : bottom left → top right
Cause of Incident

(1) External Explosion Proof: location beneath gas turbine room
### Cause of Incident

#### (1) External Explosion Proof : configuration

<table>
<thead>
<tr>
<th>단면도 Section Plan</th>
<th>사진 Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>위쪽으로 변형 Upward deformation</td>
<td>좌 현 Port</td>
</tr>
<tr>
<td>선저 외판 위쪽으로 변형 Upward deformation of bottom shell</td>
<td>우 현 Starboard</td>
</tr>
</tbody>
</table>

**함수 절 단 면**
Bow Breakplane
Cause of Incident
(1) External Explosion Proof: damage analysis

破壊面 Breakplane

Keel bent upward to the right
Cause of Incident

(1) External Explosion Proof: damage analysis

절 단 면
Breakplane

뒤틀려 있는 좌현
Twisted portside
Cause of Incident

(1) External Explosion Proof: damage analysis

Hull Exterior

연돌·디미스트
Stack・Demist
Cause of Incident

(1) External Explosion : JIG Conclusion

- Other possible causes groundless
  - running aground, fatigue fracture, faulty maintenance etc
Cause of Incident

(1) External explosion

(2) Torpedo Explosion

(3) NK manufactured
Cause of Incident
(2) Torpedo Explosion (JIG Conclusion)

- Beneath the gas turbine room
- Bottom left(portside) of the ship
- Bubble and jet effect
Cause of Incident

(2) Torpedo Explosion (What Happens?)

버블 진행 과정 [1/3]
Bubble Process
Cause of Incident
(2) Torpedo Explosion (What Happens?)

버블 진행 과정 [2/3]
Bubble Process

3. 버블 수축
Bubble contraction
Ship sagging

4. 버블 붕괴
Bubble collapse
Cause of Incident

(2) Torpedo Explosion (What Happens?)

버블 진행 과정 (3/3)
Bubble Process

Jet impact
Cause of Incident
(2) Torpedo Explosion Proof ①: Bubble

Trace of bubble on the starboard side bottom

Water pressure marks at the hull bottom
Cause of Incident
(2) Torpedo Explosion Proof ①: Bubble

절 단 면
Breakplane

좌현 함 안정기 바깥쪽
Outer surface of the stabilizing fin at the portside bottom
Cause of Incident

(2) Torpedo Explosion Proof ①: Bubble

절단된 배선
Truncated wiring
Cause of Incident
(2) Torpedo Explosion Proof ②: Wave/Testimony

- Seismic wave: 1.5
- 2 infrasound wave: 1.1 second interval
- Testimony
  - 2 explosion sound
  - Pillar of white flash
- Medical exam
  - No fragmentation/burn
  - Fractures, lacerations

KMA Seismograph near Baengnyong Is.
Cause of Incident

(2) Torpedo Explosion Proof ③: Simulation

Simulation Result

Detonation Point

Hull (Port) deformation

Hull (Bottom) deformation

Expansion of about 250kg high explosive at 6~9m in water depth and at 3m to port from center line of gas turbine room results in similar deformation as seen on ROKS Cheonan.
cause of incident

(2) Torpedo Explosion Proof ④: Evidence

- 수거 일시 / 위치: Recovery time & location

- 일시: 10.5.15(토) 09:25경
  Time: 0925 hrs, 15 May ’10 (Sat)

- 위치: 폭발원점 주변
  Location: Around the point of explosion

Coordinates:
- 37°55′38″N 124°35′55″E
- 37°55′46″N 124°36′10″E
**Cause of Incident**

*(2) Torpedo Explosion Proof ④: Evidence*

**결정적 증거물**  
**Critical evidence**

- ❑ 수거작전 **Operation**

  - 그물코 : 5mm  
    - Net loop : 5mm
  - 크기 : 폭 25m, 높이 15m, 길이 60m (5t)  
    - Size : 25m wide, 15m high, 60m long (5t)
  - 제작기간 : 4. 21~ 28 [1주일]  
    - Manufacture : 21~28 Apr. (1 week)
  - 운용선박 : 135톤 2척  
    - Operation Ship : two 135ton ships
  - 시험운용 : 5. 3 [외곽지역]  
    - Test : 3 May (outer region)
  - 수거작전 : 5. 10 ~ 현재  
    - Operation : 10 May~ Present
Cause of Incident

(2) Torpedo Explosion Proof ④: Evidence
Cause of Incident

(2) Torpedo Explosion Proof ④: Evidence

- Explosive compounds found on torpedo match that found on Cheonan
- Level of corrosion of torpedo match that of ship
- Discovery location near explosion site

Retrieved torpedo was responsible for the sinking of Cheonan
Cause of Incident

(1) External explosion
(2) Torpedo explosion

(3) NK Manufactured Torpedo
Cause of Incident
(3) NK Made Torpedo (JIG Conclusion)

- The torpedo responsible for the sinking of the Cheon was manufactured by NK
Cause of Incident
(3) NK Manufactured Torpedo: Proof ①

- Parts recovered match NK CHT-02D schematics
  - Schematics found in NK introductory brochure for export purposes
Cause of Incident

(3) NK Manufactured Torpedo: Proof ②

- Markings of Hangul(‘1번’) consistent with marking and pattern with other NK torpedo(‘4호’)
- CHT-02D specs capable of sinking Cheonan
Responsibility
Intel Confirms NK Responsibility

- NK subs + torpedoes
  - 20 Romeo, 40 Sango, 10 midget subs
- One Sango and Yeono class sub left base 2-3 days prior, returned 2-3 days after attack
  - Other country subs near base or docked
- Torpedo was made in NK
Response Measures
Response Measures
(President Lee’s Address to the People)

• Military provocation against Korea
• Violates the UN Charter
• Violates existing agreement between South and North for peace and stability
  – the Armistice, inter-Korean Basic Agreement
Response Measures
( President Lee’s Address to the People )

• Prohibit NK vessels passing through shipping lanes within Korean waters
• Suspend inter-Korean trade and exchange
  – Humanitarian assistance to children and infants exempted
• Kaesung I.C. duly considered
• Refer the matter to the UNSC
Response Measures
(President Lee’s Address to the People)

• Korea will no longer tolerate any provocative act by the North

• Maintain the Principle of Proactive Deterrence
  – Korea to exercise self-defense should NK militarily invade its territory, territorial water and airspace

• Urge NK
  – To apologize and immediately punish those responsible
  – To change and start thinking for its people.
Response Measures
(President Lee’s Address to the People)

• Korea’s goals
  – Attainment of peace and stability of KP
  – Bring about prosperity for all Koreans
  – Realize the vision of peaceful reunification

• KP must not be the last standing danger zone

• Need to solidify national security readiness, strengthen ROK-US joint readiness
Response Measures (Inter-Korean)

- Prohibit NK vessels from entering Korean waters and ports
- Suspend inter-Korean trade
  - Prohibit imports of NK goods, deny business (processing on commission) projects
- Deny application by S. Koreans
  - New investment and expanding current ones
  - Visits to NK (other than Kaesung, Keumgang)
- Suspend assistance projects
  - Humanitarian assistance to vulnerable groups exempt
Response Measures (Military)

- Resume psychological warfare
- Conduct ROK-US combined anti-submarine exercise
- PSI maritime interdiction exercises within the region and beyond
- Prohibit entry of NK vessels into Korean waters

Further military and non-military measures contemplated based on NK response
Response Measures (Diplomatic)

- Pursue all possible diplomatic responses
  - Close coordination with US: Ministerial, 2+2, Summit
  - Close consultations with Japan, NATO, EU
  - Active discussions with China, Russia
- Take the matter to the UNSC
- Strengthen implementation of UNSC 1874, 1718
- Active participation in PSI
Conclusion
Thank You