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War and terrorism – collateral consequences for engineering and construction insurers

Eur Ing **Richard Radevsky**

BSc, CEng, CSci, CEnv, IntPE, FICE, FCIWEM, MEI, MIFireE, FCIArb

&

Eur Ing **Doug Scott**

BTech CEng, FIChemE, MEI

Charles Taylor Adjusting Limited

88 Leadenhall Street

London

EC3A 3BA

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Richard Radevsky

*Worked in construction,
consulting and contracting*

Charles Taylor Adjusting

*Risk surveys and risk
engineering worldwide*

Note: Some photo for illustrative purposes only

ISSUES

- Access for surveyors and adjusters
- Working difficulties
- Construction site security
- Threats from past war and terrorism
- Policy exclusions
- Extra costs and time for repairs to damage
- Additional analysis





- Middle Eastern site
- Terrorist attack at adjacent site
- Surveyor evacuated as “non-essential personnel”
- Had to return later – extra time and cost

- ▣ Threat assessment indicated area was peaceful
- Local source warned against a visit on date planned
- Opposition politician was planning a rally. It was suspected it might turn violent which it did

- New mine in war torn country became target for terrorists
- Visit by road too hazardous.
- Cost of a helicopter visit too costly USD 75,000
- Insurer unwilling to cover construction risk without access for surveyor/loss adjuster
- Project subsequently suspended for several years because of security situation

- Access to a refinery too hazardous for a survey
- Pre-risk report needed before cover was possible
- Surveyor had visited location before war broke out
- Using press photos, other public information and questionnaires for refinery staff, report was produced to allow underwriting

CASE STUDY

ACCESS – attacks on Police

Motorway in remote area of North Africa was guarded by paramilitary Police.

Terrorists attacked Police

Contractor concluded it was safest to work without Police presence

Surveyor worked without normal Police escort



CASE STUDY

WORKING DIFFICULTIES – supply of explosives

- Explosive used for drilling and blasting of rock on railway construction site in North Africa
- Explosives tightly controlled and required military escort
- More rock encountered than anticipated
- Supply rate for explosives dictated critical path



WORKING DIFFICULTIES – insecure work area

- North Africa site - Due to security concerns access for a site investigation impossible.
- Tunnelling hit ground conditions different from those anticipated
- TBM became stuck in squeezing ground
- Rescue necessary from surface (insecure area) with increased cost and restriction on who could undertake the work



CASE STUDY

SITE SECURITY – site helicopter

- North Africa site under threat from terrorists
- Roadside bomb destroyed armoured car
- Helicopter used to travel between parts of site and to nearest airport



- Access to some high value sites (onshore and offshore) sometimes has to be by direct transit from third country
- Immigration and security checks at a “gateway”



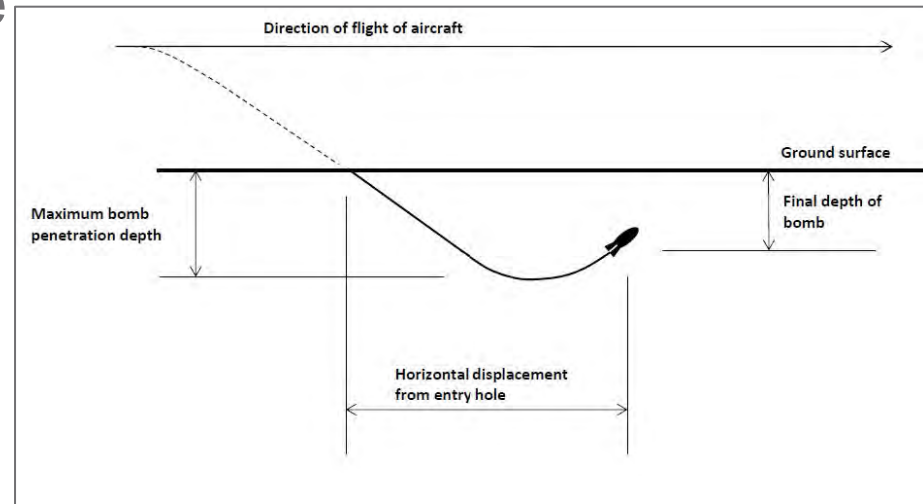


- South Asian hydropower plant attacked by terrorists with pressure cooker bombs
- Fortified army camp established
- New risk introduced of accident during army live firing exercise – would damage by stray ammunition fall within war/terrorism exclusion?

CASE STUDY

THREATS FROM PAST – Unexploded ordnance removal

- Middle east oilfield below site of past war
- Sub-surface probing necessary for buried UXO before well drilling
- Dispute arose on how deep the probing had to go
- Analysis by military scientist identified that air-dropped bombs into wet ground would penetrate deepest



J-curve

THREATS FROM PAST – Contaminated aggregate

- Middle eastern construction site – former war zone UXO removal completed
- Aggregate imported from another site
- Mortar rounds found in aggregate – UXO not completed there and/or poor quality control

Policy Exclusion – Absence of security

- In Libya theft from oil installation after fall of Gadhafi government
- Thieves exploited lack of security
- Not terrorism and no war had been declared – was it a civil war? Different agencies had different views.

Policy Exclusion – Terrorism or industrial accident?

- Major explosion in Middle Eastern munitions bunker in built up area – thousands of building damaged nearby
- Terrorism or industrial accident?
- Seismologist determined how many blasts.
- Conclusion it was an industrial accident.

Extra cost and time – Maintenance difficulties

- Access to power plant only possible through military checkpoints
- Thermographic equipment, level sensors, drones and radioactive sources not permitted.
- Problems to check for electrical hot spots, subsidence of structures and weld integrity.

Extra cost and time – Increased transport costs

- Storm damaged road in Central America – needed large quantities of rock for repairs
- Nearest quarry now in terrorist controlled area.
- Terrorist demanded payment to allow rock removal.
- Next nearest quarry a lot further away and cost more than original construction.

CASE STUDY

Extra cost and time – Confined and inaccessible spaces



- Mobile phone stations in M/East war/terrorism area (no war/terrorism cover)
- Small compounds unstable power. Electronics, air-conditioning, gensets & fuel.
- Regular fires. No adjuster access.
- Investigations based on photos from maintenance staff.

Extra cost and time – Delayed repairs



- Wind turbines in W/Asia damaged by terrorist explosives.
- Operational policy covered terrorism and Loss of Profits.
- Repairs should have taken 2 weeks but access not permitted by army.
- Policy excluded denial of access by govt action and most of lost profits.

Additional analysis by underwriters

Is there access for surveyors and adjusters?

Could the situation change during policy period?

Will standard war and terrorism exclusion work?

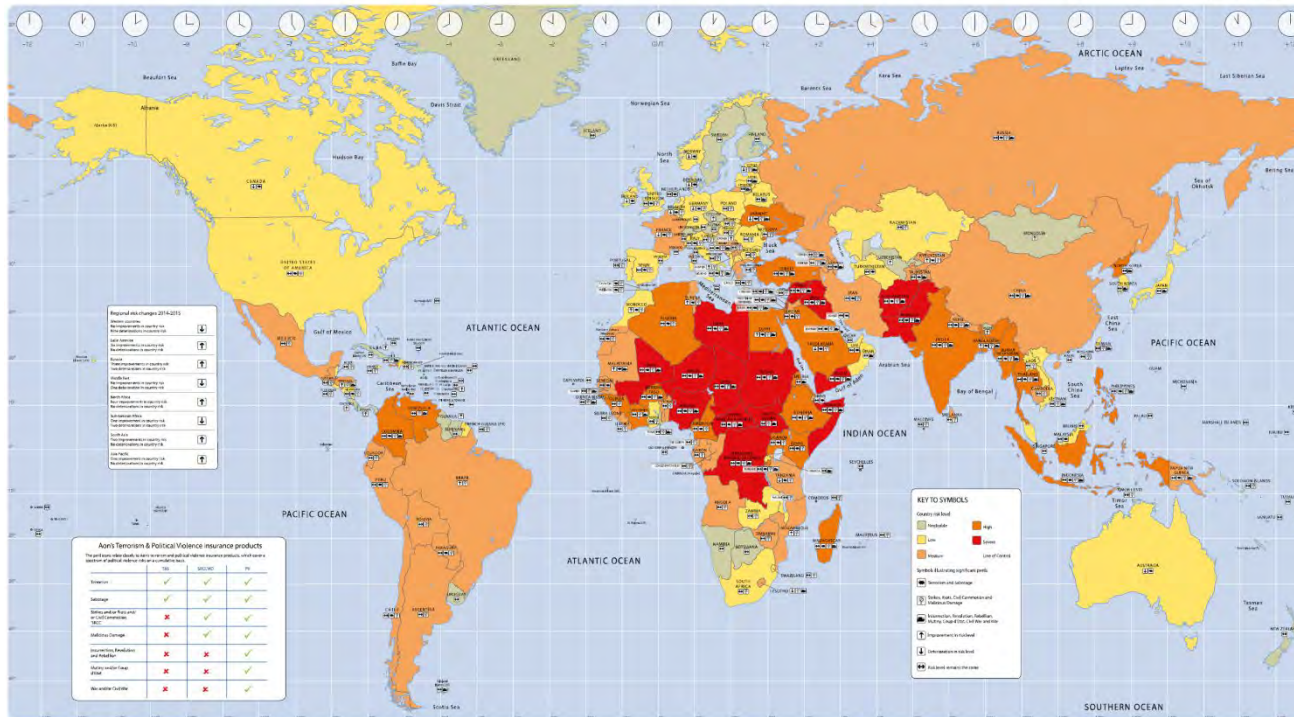
What unusual threats may be from past war/terrorism?

How likely unanticipated consequences of war/terrorism increase size of losses?

Is further analysis needed?

Spreading risk – increasing in complexity

2015 Terrorism & Political Violence Risk Map



Aon's approach to terrorism and political violence risk management combines threat assessment, impact analysis and crisis management consulting, with individually structured insurance programmes. For further information, visit: aon.com/terrorismmap

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