

**NUCLEAR TERRORISM: REACTORS AND RADIOLOGICAL ATTACKS
AFTER SEPTEMBER 11**

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The terrorists responsible for the attacks on 11 September may have considered flying aeroplanes a nuclear facility. Although reactors might withstand a small plane colliding with the building, larger planes would have catastrophic effects. Avoiding such attacks requires preventing hijackings as much as reinforcing nuclear facilities. However, two familiar dangers remain more likely than the plane threat: truck bombs and insiders. Truck bombs have been used to considerable destructive effect by many groups and for many objectives. It is questionable whether reactors would withstand such attacks, but there are countermeasures that can improve the situation. Insiders, especially if collaborating with outside groups, may pose a threat not only of material theft, but also of sabotage because such insiders are more likely to be aware of vulnerabilities in a reactor's operating procedures or facilities. Historically, attacks against reactors have been committed for symbolic reasons with the object of either disrupting the facility's operations or creating fear. Assaults on reactors have rarely sought to cause casualties as the primary goal of the attack, and this is a trend that is likely to continue as there remain more straightforward means of causing casualties if that is the terrorists' principal objective. Apart from reactors, other parts of the nuclear fuel cycle are vulnerable to attack: reprocessing facilities and transport between sites are two key examples. Terrorists have sought also to use radiological weapons, mostly on a small scale. If the terrorist group's intention is a radiological attack, then destroying a reactor is only one, albeit very public and dangerous, way to achieve this goal. Reactors and nuclear facilities may not be the most likely terrorist targets but the potential consequences of such an attack should compel both governments and the international community to seek new ways of protecting such sites.