VIII. Israeli nuclear forces

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Israel continues to maintain its long-standing policy of nuclear opacity: it neither officially confirms nor denies that it possesses nuclear weapons.¹ Like India and Pakistan, Israel has never been a party to the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (Non-Proliferation Treaty, NPT).²

Declassified US and Israeli government documents indicate that Israel began building a stockpile of nuclear weapons in the early 1960s, using plutonium produced by the Israel Research Reactor 2 (IRR-2) at the Negev Nuclear Research Center near Dimona.³ There is little publicly available information about the operating history and power capacity of the unsafeguarded IRR-2. The ageing heavy water reactor remained operational in 2017 despite the existence of a number of identified structural problems.⁴ It may now be operated primarily to produce tritium.⁵

It is estimated that Israel has approximately 80 nuclear weapons (see table 6.9). Of these, approximately 30 are gravity bombs for delivery by combat aircraft. Several bunkers thought to contain nuclear bombs are located at the Tel Nof airbase south of Tel Aviv. The remaining 50 weapons are for delivery by land-based ballistic missiles. Israel’s arsenal includes solid-fuelled, two-stage Jericho II medium-range ballistic missiles, which are believed to be based, along with their mobile transporter-erector-launchers, in caves at an airbase near Zekharia in the Negev desert.⁶ A three-stage Jericho III intermediate-range ballistic missile, with a range exceeding 4000 kilometres, was declared operational in 2011.⁷ In 2013 Israel tested a Jericho III with a new motor that some sources believe may give the missile an intercontinental range—that is, a range exceeding 5500 km.⁸ Its development status is unknown.

There are numerous unconfirmed reports that Israel has equipped its fleet of German-built Dolphin class diesel-electric submarines with

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² For a summary and other details of the NPT see annex A, section I, in this volume.
⁷ O’Halloran, ed. (note 6).
nuclear-armed sea-launched cruise missiles, giving it a sea-based second-strike capability. German and Israeli officials have consistently denied these reports. Israel has purchased six Dolphin class submarines, five of which have been delivered to Israel. The sixth submarine is scheduled to be delivered by the end of 2019. In October 2017 the German Government announced that it had agreed to subsidize the sale of three new submarines to Israel to replace the first three Dolphin class boats, which were delivered in the late 1990s. The new submarines will enter service from 2027.

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