Tenth special session
AD HOC COMMITTEE OF THE TENTH SPECIAL SESSION
Agenda item 9


Note verbale dated 23 May 1978 from the Permanent Representative of Iraq to the United Nations addressed to the Secretary-General

The Permanent Representative of Iraq to the United Nations presents his compliments to the Secretary-General of the United Nations and has the honour to enclose a copy of "A Study on Zionist Conventional and Nuclear Armament" and to request that it be issued as an official document of the tenth special session of the General Assembly under agenda item 9.
A Study On
Zionist Conventional And Nuclear Armament

Presented By
The Iraqi Delegation To The United Nations
General Assembly’s Special Session On
Disarmament

May - June 1978

Baghdad 1978
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Introduction

The Iraqi delegation to the United Nations General Assembly's special session on disarmament, presents this paper on Zionist conventional and nuclear armament for the consideration of all the delegates & those concerned with its repercussions on world peace in general and the Third World and the Middle East in particular.

We hope that this study will clearly illustrate the kind of relations Israel maintains with the racist regime of South Africa and the inimical impact this relationship had on African liberation movements and governments attempting to preserve their independence and national integrity in the face of imperialist encroachments on their sovereignty. We trust too that the imperialist-zionist relationship will be seen in its true dimensions vis-à-vis the Arab nation and the Third World.

The Israeli Military Budget

The Israeli military budget is among the largest military budgets in the world. The percentage of its military expenditures in relation to its Gross National Product is considered to be the highest in the world.

Back in 1966, military expenditures only constituted about 10% of the GNP and 25% of the total Israeli Budget, whereas in France, Italy and Federal Germany, military expenditures ranged between 3 and 4% with respect to each country's GNP. (1)

The 1967 post war budget represented the first huge leap in Israeli military expenditures. According to Michael Bruno, Professor of Economics at the Hebrew University, "Israel military expenditures for 1967-1969 reached the sum of $2,400 million, a total which was almost equal to the military expenditures of the preceding ten years which followed the 1956 Suez campaign and totalled $ 2,500 million." (2)

This level of expenditure is confirmed by the continuing increase in the military budget from 1964 onward when it totalled 923 million Israeli pounds and reached a total of 5,000 million in 1970, thereby reaching the 30% mark of the GNP. It is useful to recall here that the U.S.A.'s military expenditures for the same period constituted only 8% of the American GNP.
During 1970 also, Israeli military imports totalled $800 million whereas in 1966 the total was $160 million. The overall military expenditures in 1970 comprised 88% of the total deficit in the Israeli balance of payments during that year.\(^{(2)}\)

The military budgets for the years 1971-1972 and 1972-1973 totalled 5,546 and 5,458 million Israeli pounds respectively.\(^{(1)}\) While the estimates for 1973-1974 were about 6,350 million Israeli pounds, the exigencies of the 1973 war raised the figure to 7,600 million\(^{(3)}\). This figure does not, of course, include the emergency expenditures of the 1973 war, the estimates of which totalled 18,000 million Israeli pounds\(^{(4)}\). According to sources in the Israeli Defence Ministry 22,000 million Israeli pounds had been required to cover the loss in weapons and equipments\(^{(2)}\). Several measures were taken to cover this figure: War loan (3,000 million), new taxes (1,500 million), price increases and reduction of governmental aid allocations (1,500 million) and foreign aid (8,000 million). The rest of the debt was paid up by the U.S.A.\(^{(1)}\)

Since 1974, Israeli military expenditures have grown by leaps and bounds. The 1974-1975 budget totalled 15,528 million Israeli pounds ($3,668 million)\(^{(5)}\), constituting about 38% of the general budget and one third of the GNP\(^{(6)}\).

The 1977-1978 Israeli military budget which was prepared before the recent political developments in the area and the Israeli-Egyptian negotiations included an increase in military expenditures. The Director General of the Israeli Defence Ministry stated that he does not expect a reduction in the Israeli military budget even if Israel reached a settlement with Egypt or with other countries. On the contrary, military expenditures at present will be increased by 9% and military imports will also be increased by 27%. The military budget in 1977-1978 totals 54,4 billion Israeli pounds whereas in 1976-1977 it totalled 41,1 billion Israeli pounds (11).

It should be noted that the above-mentioned figures do not include many invisible expenditures that are often not listed in the officially announced budgets, such as military debts, security requirements, allocations for military research projects ... etc., which if added to the official budget would raise its percentage rate up to 50% of the GNP.

Military observers have noted that Israel has moved from a two-to-one inferiority to the Arab states in military expenditures to a total military budget much larger than that of its major opponents combined. Furthermore, it has come from a society that had spent 8 to 13 percent of its GNP on military purposes from 1956 to 1967 to one that spent 17 to 30 percent in 1967-1973 and that it now spends up to 45 percent of its budget on the same military item.\(^{(12)}\)

### Comparisons of Israel's Military Expenditures

<table>
<thead>
<tr>
<th>Year</th>
<th>$ million</th>
<th>$ per head</th>
<th>% of GNP Spends</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>3.644</td>
<td>1.146</td>
<td>60.4</td>
</tr>
<tr>
<td>1974</td>
<td>3.869</td>
<td>1.173</td>
<td>51.0</td>
</tr>
<tr>
<td>1975</td>
<td>3.552</td>
<td>1.045</td>
<td>50.1</td>
</tr>
<tr>
<td>1976</td>
<td>4.214</td>
<td>1.201</td>
<td>56.7</td>
</tr>
<tr>
<td>1977</td>
<td>4.268</td>
<td>1.178</td>
<td>32.4</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A.</td>
<td>85.900</td>
<td>109.000</td>
<td>124.000</td>
<td>142.200</td>
<td>2,118,891</td>
<td>88.583</td>
</tr>
<tr>
<td>Soviet Union</td>
<td>252.064</td>
<td>224.022</td>
<td>205.000</td>
<td>203.100</td>
<td>99.962</td>
<td>84.200</td>
</tr>
<tr>
<td>Germany</td>
<td>62.041</td>
<td>91.000</td>
<td>13.000</td>
<td>13.000</td>
<td>836,749</td>
<td>84.200</td>
</tr>
<tr>
<td>China</td>
<td>620.577</td>
<td>265.500</td>
<td>15.500</td>
<td>15.500</td>
<td>5.500</td>
<td>84.200</td>
</tr>
<tr>
<td>France</td>
<td>52.577</td>
<td>51.500</td>
<td>4.600</td>
<td>4.600</td>
<td>5.500</td>
<td>84.200</td>
</tr>
<tr>
<td>Britain</td>
<td>58.689</td>
<td>54.200</td>
<td>5.500</td>
<td>5.500</td>
<td>101.000</td>
<td>84.200</td>
</tr>
<tr>
<td>Iran</td>
<td>38.415</td>
<td>31.300</td>
<td>4.300</td>
<td>4.300</td>
<td>101.000</td>
<td>84.200</td>
</tr>
<tr>
<td>Italy</td>
<td>60.389</td>
<td>54.200</td>
<td>4.600</td>
<td>4.600</td>
<td>101.000</td>
<td>84.200</td>
</tr>
<tr>
<td>Japan</td>
<td>55.389</td>
<td>31.300</td>
<td>4.300</td>
<td>4.300</td>
<td>101.000</td>
<td>84.200</td>
</tr>
<tr>
<td>Israel</td>
<td>22.479</td>
<td>21.000</td>
<td>3.300</td>
<td>3.300</td>
<td>101.000</td>
<td>84.200</td>
</tr>
<tr>
<td>Canada</td>
<td>80.389</td>
<td>73.200</td>
<td>3.200</td>
<td>3.200</td>
<td>101.000</td>
<td>84.200</td>
</tr>
<tr>
<td>India</td>
<td>60.389</td>
<td>54.200</td>
<td>4.600</td>
<td>4.600</td>
<td>101.000</td>
<td>84.200</td>
</tr>
</tbody>
</table>

References

5. Ibid.
6. Ibid.
7. Ibid.

Notice: In 1973 $ 1 = 4.20 Israeli Pounds
In 1976 $ 1 = 8.67 Israeli Pounds
Israel's major industrial sector is the one engaged in arms production for the Israeli army as well as commercial purposes. It is estimated that the country has over 120 arms factories, many of which have branches in America and Europe. During early stages the arms industry pursued a policy of modification, copy-production or assembly of foreign military equipments and weapons. Since 1973 war the trend to manufacture Israeli original designs for certain weapons has accelerated. For instance, some 800 original patents are assumed to have been implemented.\(^{1}\)

The balance sheet of military research and development projects constituted in 1973 about 40% of the total budget of research and development projects and 80% of the applied research projects.\(^{2}\)

It is to be noted that the recent intensification of arms production is in harmony with Israel's policy of self-sufficiency, a policy adopted in an attempt to word of international pressures and to defy world opinion, which has become more aware of the aggressive and expansionist nature of the zionist racist entity.

In compiling the following list an attempt has been made to cover the weapons and equipments manufactured in Israel which have come to light through the Press, public statements, or military operations. The Israeli offensive against southern Lebanon, launched on 15.3.1978, provided Israel with the opportunity to test a wide range of its newly manufactured weapons.

Meanwhile it should be noted, that no matter how advanced is the Israeli military industry, Israel shall within the foreseeable future remain dependent on its Western allies, especially the U.S.A. for the more sophisticated weapons, the aim of which is the perpetration of more aggression.

Outstanding Israeli manufactured Weapons and Equipments

Individual Weapons

Uzi sub-machine Gun

Mass production of Uzi started in the mid-fifties. It is a modified and developed model of the Czchecoslavakian ZK-476. It is supplied with either a stationary wooden or iron pod and fires singly or semiautomatically. It can be adopted as to be supplied with Energa bomb thrower as well as with an intensive electric lamp for nocturnal warfare.\(^{3}\) A percolator for infrared ray is attached to prevent the firing from being easily located.

Uzi is manufactured also in Belgium and South Africa under license from Israel.

- Origin : Israel.
- Calibre : 9 mm.
- Weight : 7.7 lbs.
- Length : 24.5 inches
- Range : 219 yards
- Rate of fire : 600/min.

Galil Rifle

It was exhibited for the first time at the Israeli military parade in 1973. During the 1973 war, when production fell short of meeting the demand of the Israeli army an order was placed for the American M-16.\(^{4}\)

Galil throws two kinds of antitank grenades and is supplied with magazines containing 12, 35 and 50 shots. Antitank grenades are attached to the muzzle of the 12 shot magazine. It contains an indicator for nocturnal warfare covering a range of 75 m.\(^{5}\)

- Origin : Israel
- Calibre : 5.56 mm.
- Rate of fire : 650 shots/min.
Fal Rifle

It is manufactured in Israel under license from the Belgium National Fabric Company, which manufactures Uzi in return. Fal has been modified in Israel in a way as to discharge semi-automatic as well as single shots.

Origin : Belgium
Calibre : 7.62 mm.

Revolver

A special revolver for combating the kidnapping of planes has recently been manufactured. It is supplied with a sound muffler. The shots break into fragments within the body causing complete paralysis.\(^{(9)}\)

Range : 10 m.

Artillery

90 mm. S.P. Antitank Gun

The 90 mm gun was first shown in 1970. It is installed on an M-3 halftrack or stationed on the ground for firing.\(^{(7)}\). It fires in all directions while the halftrack is in motion.

The 90 mm is rather a modification of the French gun of the A.M.L. tank.

Origin : Israel
Weight : 9.4 tons with halftrack
Range : 1300 m.
Crew : 5

106 mm Antitank Recoilless Rifle

The gun is mounted on a jeep and is efficient against concrete emplacements. Manufactured by license from U.S.A\(^{(9)}\).

Origin : U.S.A.
Range : 1500 yds - stationary targets
1000 yds - mobile targets
Rate of fire : 5/min.
Crew : 2

Mortars

120 mm

The 120 mm is manufactured in two versions : light and heavy. The heavy version is mounted on armoured personnel M3 halftrack. It is presently used instead of the old 81 mm.\(^{(9)}\)

Origin : Israel
Weight : 90 kg. (light)
360 kg. (heavy)
Maximum Range : 6500 m
Weight of Projectile : 12.5 kg.
Crew : 4

160 mm.

The 160 mm is mounted on Sherman tanks after modifying the chassis. It is employed as artillery support for mechanised troops. Manufactured also in Finland by license from Israel.\(^{(10)}\)

Range : 9300 m.
Crew : 7

Field Artillery

155 mm Howitzer

The 155 mm is a development of the French 50-M. It is also a howitzer version of the American 155 mm gun. It was exhibited in 1973 as a manufacture of Sultam Company. It is fit to be mounted on a Centurion or any tank weighing over 40 tons. 24 projectiles are installed in the turret while another 26 are stored in the tank. The barrel of the 155 mm moves in all directions. Some sources say that it is manufactured in collaboration with Finland.\(^{(11)}\)

Weight : 5.6 tons
Range : 20 km.
Rate of fire : 3 shots/min.
Speed : 58 km/hour.
Crew : 7
Ballistic Missles

Katusha

The manufacturing of Katusha was revealed in 1971. The Israelis had captured Katusha during the 1967 war. Two versions are manufactured both of which are mounted on Soviet captured launchers.(12)

<table>
<thead>
<tr>
<th>Origin</th>
<th>Soviet Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calibre</td>
<td>240 mm.</td>
</tr>
<tr>
<td>1) Range</td>
<td>6400 m.</td>
</tr>
<tr>
<td>Warhead</td>
<td>23.5 kg.</td>
</tr>
<tr>
<td>2) Range</td>
<td>9800 m.</td>
</tr>
<tr>
<td>Warhead</td>
<td>18 kg.</td>
</tr>
</tbody>
</table>

Zeev

The manufacturing of Zeev (wolf) was revealed in 1974. It is an unguided ballistic missile, similar to Katusha and electronically guided.(13) Launched from a stand. There are two versions of Zeev.(14)

<table>
<thead>
<tr>
<th>1) Load</th>
<th>170 kg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>1 km.</td>
</tr>
</tbody>
</table>

| 2) Load | 70 kg. |

Two other kinds of ballistic missiles were revealed in 1974.(15)

<table>
<thead>
<tr>
<th>1) Effective against fortifications</th>
<th>load</th>
<th>200 kg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>400 m.</td>
<td></td>
</tr>
</tbody>
</table>

| 2) Explodes in the air causing a screen of splinters |
| Load | 4.5 kg. |
| Range | 150 m. |

Missiles

Antitank Guided Missiles

SS - 11

The French SS - 11 was first assembled and is now manufactured in Israel. It is mounted on M-3 halftrack or helicopter.(16)

<table>
<thead>
<tr>
<th>Origin</th>
<th>France</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>30 kg.</td>
</tr>
<tr>
<td>Range</td>
<td>500-3000 m.</td>
</tr>
<tr>
<td>Speed</td>
<td>150 - 190 m./sec.</td>
</tr>
</tbody>
</table>

Tow

Tow was obtained from U.S.A. and developed in Israel after the 1973 war. The American Tow was employed for the first time in 1973 by the American forces in Vietnam.(17)

<table>
<thead>
<tr>
<th>Origin</th>
<th>U.S.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>18 kg.</td>
</tr>
<tr>
<td>Accuracy</td>
<td>90%</td>
</tr>
<tr>
<td>Range</td>
<td>3 km. within 15 seconds</td>
</tr>
</tbody>
</table>

Ground to Ground Missiles

Jericho

Jericho is a modification of the French M.D - 660 that had been built for Israel by Dassault Company before 1967.(18) It is a two - stage missile, capable of carrying nuclear warheads. About 3-6 missiles are built per month.(19)

<table>
<thead>
<tr>
<th>Range</th>
<th>450 km.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warhead</td>
<td>450-675 kg.</td>
</tr>
</tbody>
</table>

Ground to Air - Missiles

Hawk

The building of the American Hawk in Israel was revealed in 1972. The turbines are also believed to be built in Israel.(20)
Origin: U.S.A.
Range: 19 nautical miles
Motor: two stage

Air to Air Missiles

Shefrer

Shefrer operated in 1970 on the Suez Canal during the war of attrition with Egypt. It was officially introduced in 1973. It carries a highly explosive warhead and is guided by infrared heat, which emanates from the engine of the target.\(^{21}\)

Warhead: 11 kg.
Origin: Israel

Air to Ground Missiles

Luz-1

Luz-1 is a modification of the American Maverick. According to some sources, it was designed to destroy SAM-6 missiles in their bases. It is installed in Phantom and Kfir fighters. Luz is guided by television and is immune to electronic jamming devices.\(^{22}\)

Origin: Israel
Range: 80 km.
Warhead: 200 kg.

Ship to Ship Missiles

Gabriel

Gabriel is a modification of the West-German Corvaita. It was exhibited in 1970. It is installed in the Israeli-made boat Saar. There are two versions of Gabriel.\(^{23}\)

1) Range: 22 km.
2) Range: 41 km.

A third version is assumed to be under construction.\(^{24}\)

Ships

Landing Ships

Several types of landing ships are built in Israel most outstanding of which are the following.\(^{1-3}\)

1) “Ash” Class —

Asalad (61), Ashkelon (63), Achziv (65)

Origin: Israel
Load: 330 tons
Speed: 10.5 knots
Gun: 20 mm.
Crew: 20

2) “LC” type

Origin: Israel
Load: 500 tons
Speed: 10 knots
gun: 20 mm.
Crew: 12

Light Missile Boats

Rechev

The construction of Rechev was made public in 1973. Rechev is a developed type of “Saar”, which was designed in Israel as a modified copy of the German Corvaita and was built before 1967 in France. There are two versions of Rechev boats.\(^{25}\) The second version is built under license in South Africa:

1) Rechev “1”: It is equipped with four engines, seven missile launchers, four bomb throwers two guns and several machine guns.\(^{27}\)

Length: 58 m
Weight: 415 tons
gun calibre: 76 mm.
Speed: 32 Knots
Crew: 45
2) Rechev "2" : It is designed to transport a helicopter.
Weigh : 850 tons
Speed : 42 Knots
Crew : 60

Dabur

It is a patrol boat with double turbines and is similar to the American boat "Swift". It is designed to carry ship-to-ship guns.\textsuperscript{(29)}
It is built under Israeli license in South Africa.\textsuperscript{(29)}

- Length : 21.6 mm.
- Weight : 22 tons
- Speed : 35 Knots
- Crew : 10

**Tanks**

Several modifying measures were taken for increasing the effectiveness of the British and American tanks owned by Israel.

**Super Sherman M-4**

Super Sherman is an Israeli adaptation of the British Sherman. The original turret was replaced by a missile launcher and a diesel motor with a hydraulic system.\textsuperscript{(29)}

**Patton M-48**

The 90 mm calibre gun of the American Patton was replaced by 105 mm gun. The turret was replaced by a lower one that moves in all directions and the engine was improved. The modified Patton is considered as efficient as the American M-60.\textsuperscript{(31)}

**Centurion**

The engine of the Centurion tank was replaced by the American "Continental". Speed and performance were raised to 43 km/per hour and 400 km respectively. The gun was also improved.\textsuperscript{(29)}

It is noteworthy that the Israeli modification of the above-mentioned tanks was such as to make them as similar as possible in order to facilitate their maintainance and to obviate the problem of spare parts.

**Merkava**

Merkava is a new Israeli tank project carried out in collaboration with the U.S.A. An allocation of $106 million has been invested by the American administration for this project, which is scheduled for the eighties.\textsuperscript{(32)} The prototype of Merkava is equipped with a sophisticated fire and laser reconnaissance system. It is also resistant to nuclear, chemical and bacteriological war.

- Engine : American Continental
- Weight : 56 tons
- Hull : A special kind of ballistic steel plate (manufactured in South Africa).\textsuperscript{(31)}
- Crew : 4

**Aircraft**

**Arava 201**

The building of the transport Arava 201 began in 1967. The crash of the first test plane on 19.11.1970, causing the death of its three pilots forced a setback in production.\textsuperscript{(33)} Attempts were made to sell the already produced Aravas to some developing countries to cover the expenses.\textsuperscript{(33)}

**Arava 202**

The improved transport and ordnance-carrying Arava 202 was shown in June1977 at the Paris Air show. Two innovations were featured in Arava 202. The whit comb winglets are designed to accelerate its speed and improve its performance, and the wet wing with single point pressure refuelling which replaced the four wing tanks resulted in an increase in fuel capacity. Arava 202 is powered by the Canadian Pratt whitney turbo-props and equipped with search systems.\textsuperscript{(37)}

- Performance — 9 hours
- Range — 1676 km.
- Load — 1598 for long range
- 2450 for short range
Kfir

The construction of Kfir started in 1970. In 1972, a batch of 24 fighters was ready for flight as the Barak. After the 1973 war, it was announced in Israel that a new Kfir was accomplished. Kfir is designed after the French Mirage-3, the designs of which were stolen by the Israelis from Switzerland. and equipped with the American -J-79, which is imported from U.S.A.

Kfir is both a fighter — bomber and an interceptor. It is also adapted to carry nuclear bombs and is considered among the major nuclear deliverers in Israel. It has a delta-shaped wing and is armed either with two 20 mm gun or with the Falcon type gun.

Maximum Speed : 2.2 Speed of sound
Maximum Altitude : 15.2 km.
Weight : 14.500 kg.
Load : 2.7 tons
Gun rate of fire : 6000 'min.
Crew : 4

Iryee

The building of the strike fighter Iryee (lion) is in process. It is designed to match the American F-16 and to replace the Kfir bomber. It is supposed to be powered by the American F-100(32). An allocation of $ 440 million was made for this project and its production is scheduled for the eighties.(32) Much criticism was leveled against the project on the ground that it was being carried out while the Israeli government was imploing European Jews to help it in raising the living conditions of about 45 thousand poverty stricken families in Israel.(41)

Helicopter

A project for the building of helicopters is being deliberated with several companies in the U.S.A.(41)

References

29. Akher Sa'ah (Cairo) 2.3.1977.
Israeli Military Exports

If the motto "Exportation of Death" is correct for big Powers, it is doubly correct for Israel".

Yediot Aharonout
4 February 1977

Israeli military exports cover a wide variety of conventional as well as sophisticated weaponry. Shimon Peretz, then Minister of Defence, is reported to have said: We are now in a position which enables us to supply France with more weapons than what she is able to supply us(1).

That arms production in Israel far exceeds the demands of its army or its so-called security is illustrated by the fact that about 40 out of the 120 armament plants operating in Israel, are orientated for exportation purposes.(2) Because of cheap labour and the fact that many Israeli manufactures follow the lines of modification or copy production which usually cost less than home-designed manufactures Israel has managed to sell its products at lower prices than European and American products.

The following table shows the growth of Israeli arms exports since 1971:

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>70</td>
</tr>
<tr>
<td>1972</td>
<td>80</td>
</tr>
<tr>
<td>1973</td>
<td>70</td>
</tr>
<tr>
<td>1974</td>
<td>96</td>
</tr>
<tr>
<td>1975</td>
<td>170</td>
</tr>
<tr>
<td>1976</td>
<td>320</td>
</tr>
</tbody>
</table>

Israeli estimates for the year 1977 were about $ 420 million. This figure, however, was not realised owing to American objections to the sale of Kfir fighter-bombers to Ecuador. Israeli
estimates for the years 1978 and 1979 are $490 million and $540 million.(13)

Major Israeli Military Exports:

Aircraft:
Exports in 1977 totalled $145 million.(4)

Arava:

Preliminary attempts to export Arava started in 1973 and was carried out successfully with regard to several Latin American states. In 1974 Mexico purchased (30) (53) and Nicaragua purchased (3). A photo of Arava appeared in an Equadorian Journal without reference to the number of purchases(9) Purchases have also been made by Uruguay, Salvador and Bolivia. (17) In 1976, Arafa was seen in the skies of the Philippines. (4)

It was revealed lately that an Arava plant was to be erected in Mexico for the marketing of this plane to the Americans: Shares: Israeli 40%, Mexican 51%. (5)

Kfir

Deliberations between Israel and U.S.A. have been in progress since 1977 concerning the sale of Kfir. American objection is based on the fact that the Kfir engine is American-made and that the commercial price of Kfir makes it competitive with the American F-16.

Kfir: $5.4 million. F-16: $7 million.

Israel is trying to get American consent for Kfir deals to Equador, South Africa, Singapoure, Brazil, Peru, Venezuela and the Philippines. (5)

Tanks:

About (600) armour turrets (Faster) were delivered to the U.S. army, to be installed in the Patton M-48.

Another type of turret (Leader) is supposed to have been delivered to the U.S. army. Leader had been modified and improved in U.S.A. before the plant was transferred to Israel. (13)

Boats

3 Rechev boats ($25 million each) were delivered to South Africa in 1977. Another 8 boats should be delivered in 1978 and 1979(13).

South Africa also purchased 7 Rechev boats — old version ($10 million) as well as 6 Dabur boats. Dabur boats are built in South African docks. (15)

Missiles

Gabriel:

Gabriel was introduced at the International Aeronautic Exhibition in Paris in 1972. Orders were placed by Equador ($30 million) (15) Singapore, South Africa, Argentina Malaisya Thailand and Formosa (15).

Shefrer

Shefrer was made public in 1973. Orders have been placed by Formosa, Chile and South Africa. (16)

Electronic Equipments

Tadiran Company Branches have already been established in Singapoure and Brazil. In 1972, Tadiran exports totalled $8 million. (17) Elta radars are also sold in Finland and Argentina (19).

Elscint Company branches have been established in France, Federal Germany and U.S.A. Elscint exports totalled $7.5 million in 1972.

Motorola exports have been sold in Iran, Canada, Cyprys, Liberia, Ivory Coast, Zair, Ghana, Nigeria and Ethiopia. Motorola exports totalled $5.7 million in 1972. It was also announced in Israel that some purchases were made by Turkey and Cyprys during their conflict. (20) Among the chief regular customers of Israeli military hardware are the NATO states and South Africa (20).
Uzi machine gun

Several purchases were made by U.S.A., Federal Germany, Iran and South Africa.\(^{(21)}\)

Galil Rifle:

Purchases were made by Britain (1974) and Thailand (1976).\(^{(22)}\)

Cannons:

106 recoilless anti armour cannons have been delivered to Thailand and other states. Israel is said to have delivered L-33, calibre 155, to Thailand. Howitzers have also been delivered to South Africa and several other countries\(^{(23)}\).

Ammunition

Little information is available concerning ammunition sales. Some African states, notably Kenya, are considered to be regular purchasers of Israeli ammunitions\(^{(24)}\).

References

3. Ibid.
15. Israeli Broadcasting station, 10 February 1978.
17. The Israel Economist December 1973, p. 133.
Major Arms — Producing Companies and Plants

About 120 arms — producing companies and plants operate in Israel. The following are the most outstanding:

Israel Aircraft Industries (I.A.I.)

I.A.I. was launched in 1953 with a capital of $ 600,000, carrying the name “Bedek”. Its activities were limited to the maintenance of aircrafts and engines. In 1958, it signed a contract with the French company “Potoz Airfouga” to produce the trainer “Magister” in Israel. In 1970 its capital reached $ 30 million(1). I.A.I. is the largest military enterprise in Israel and owns about 14 departments and plants specialized as cited below:

1. BEDEK — Maintenance of hulls and engines. Storage of spare parts.
3. PRODUCTION SECTION — Manufacturing of aircrafts and spare parts.
4. FACTORY B — Building of Gabriel missile, electronic screens and double-barrelled anti-aircraft guns, calibre 20 mm.
5. ELTA — Manufacturing of electronic and radar equipments.
6. GROUND EQUIPMENTS PLANT
7. ORLITE ENGINEERING — Manufacturing of plastics for aircrafts and boats.
8. SERRO HYDRAULIC PLANT — Manufacturing of hydraulic equipments.
9. TAMAM PRECISION — Manufacturing of special aeronautical parts.
10. GOLAN PLANT — Manufacturing of electronics(1).

Beit Shemesh Engine Plant

This is the second largest plant in Israel. It was established in 1967 in collaboration with the French Turbomeca plant(1). Major Productions:

5. Spare parts for Canadian pratt & Whitney turbo-jets.
6. Maintenance and repair of Artouste and Astazou turbines. Beit Shemesh is said to be manufacturing a new engine to replace the American J-79 mordex to overcome the difficulties in commercializing Kfir strike fighter.(1) It was revealed as well that three new types are being manufactured in collaboration with the U.S.A.

Ammunition and Spare part Plants

There are about 40 plants which produce ammunitions and spare parts in Israel. The following are known according to their production:

1. MAVLAN — Manufactures aircraft bombs, artillery projectiles and ammunition for light weapons.
2. TAKAS — Manufactures artillery projectiles, mortars and mines.
3. UNIVERSITY PLANTS — Manufactures aircraft bombs, incendiary bombs and mines.
4. OSSIM — Manufactures hand grenades and artillery bombs.
5. RANYOK — Specialized in ammunition and spare parts for light weapons.(1)

Electronics

The following are the well-known companies that produce electronic equipments:

TADIRAN

It was established in 1961, with three departments for electronics, telecommunications and consumer production such as batteries and airconditioning.

Tadiran signed a contract in 1973 with the American Hughes company for a joint production of thin and thick film microcircuits for commercial purposes(1). In 1974, Tadiran
bought the bankrupt American Electro-Space company for military telecommunications and transferred the plant to Israel. The following are the major electronic equipments which are manufactured by Tadiran:

TAD - 410 : - It comprises 12 channels with and extra channel for communications with 12 telegraphic lines.

RM VRC - 240T : - This is for air-to-surface telecommunications. It comprises 7000 channels. It can be installed in tanks, carried by infantry or on the back.

AN-PRC - 90 : - This is a small communication system especially designed to locate lost soldiers within a range of 140 km. It is manufactured under license from the American Sylvania Company.

TAD - 200 - This is a radio-telephone system comprising 4,12 or 24 channels. It is installed in military telecommunications. Vibration: 615-960 megahertz.

PRC - 600 : - This is a telecommunication system which operates within a range of 1600 m. It can be held in the hand or attached to the belt. It is equipped with a receiver and a microphone to ensure contact with other telecommunications, such as VRC-12, FRP-25 and PRC-17 which are also manufactured by Tadiran.

PRC - 25, 17 : - This is a new wireless system which comprises 20 waves. It is manufactured by order from a west-European state. It is mainly used by infantry and armour infantry and is borne on the back or installed in a vehicle. The first export deal was concluded in 1975.

ELTA

It is the second largest enterprise in the field of electronics and is owned by the I.A.I. Elta was established in 1960 for the re-manufacturing of American and European equipments. It was develop into a manufacture of Israeli military designs. The major products of Elta are the following:

Radar Band - S : - This radar is used for military and civil purposes. It is equipped with an electronic computer which detects low-altitude flying planes, and is immune to ground jamming. In 1972 it was installed at the Lod Airport.

Elta produces other types of radars: radars for fighters and low-altitude air battles such as those which are installed in Phantom, Skyhawk and Mirage fighter-bombers.

Electronic Computers — Isaac 77 : - This system is installed in aircrafts and is adapted to control fire.

Telecommunication Equipments — EL/K - 1000 and EL/K - 1004 : These two equipments are used by air, naval and ground units.

ELRON

This is the third largest company in the field of electronics. It was established in 1956 as a workshop and was transferred in 1962 to a plant. It specializes in nuclear equipments and has several branches and affiliated companies, such as: ELSCINT

It was established in 1969. It manufactures sophisticated equipments for nuclear research projects for export purposes.

ELBIT

It was established in 1966 in coordination with the Ministry of Defence. It manufactures small calculators, wireless telecommunications and television screens under license from the American Hughes Company.

C.D.S

This company was established by Elron in 1965 in coordination with the American C.D.S. It manufactures huge electronic computers and offers services to the Nuclear power Agency, to the Weizmann Institute and to other scientific institutions.

S.D.S

It was established in 1969 by Elron and the American XEROX company. 26% of the shares are owned by Elron, 50%
are owned by XEROX while the rest of the shares are owned by individuals and other parties. It manufactures disc-drive for electronic computers.\(^{(21)}\)

**MONOSEL**

It was established in 1969 by Elron (shares: 46\%) and the American Monstano Company (shares: 60\%). It manufactures electronic computers\(^{(22)}\).

**EL MIDEX**

It was established by Elron (shares: 50\%) and the Israeli Research and Development Company (shares: 50\%). It manufactures medical equipments.

**ELTEX**

It manufactures electronic printed circuits.

**MOTOROLA**

This is the fourth largest company in the field of electronics in Israel. 37\% of its shares are owned by the American Motorola Chicago Company. It manufactures military telecommunication systems and other electronic equipments.

**TELRAD**

This company was established in 1951 by the Koor Assembly (shares: 50\%) and the Consolidated Near East (shares: 50\%). It manufactures telephone electronic equipments\(^{(23)}\).

**I.C.I.**

It was established in 1951. It manufactures telephone communication apparatuses for the Israeli army and other control systems for airports.

**A.E.L.**

This company is a branch of the American Electronic Labs of colmer Manufactures. It was established in 1967 for the production of microwave equipments and other military electronics for the Israeli army.

**ELECTRO OPTICAL**

This company was established in 1941. After the establishment of the State its shares were distributed among the Ministry of Defence (50\%) and the Dutch company, Oulele Delf (50\%). It manufactures optical control systems.

**VISCHAY ISRAEL**

This company is a branch of the American Intertechology company. It was established in 1969 and manufactures delicate electronic parts.

**MICRO-ELECTRONICS**

This company is owned by the American J.F.D company and the American Components Corporation. It produces aerials and television transmitters.

**ELCO TRANSFORMERS**

This company was established in 1949 by Discount Bank Investment and the Zalkin family. It manufactures huge electronics, refrigerators and transformers for the Israeli army.\(^{(24)}\)
References

10. Ibid.
12. Ibid.
13. Ibid.
14. Ibid.
20. Ashkar, Riyadh and Ajlan, M. Industry & Technology in Israel, Center for Palestine Studies, Baghdad, 1974, p. 234.
21. Ibid.
22. Ibid.

The American Armament of Israel

American military aid to Israel has reached the levels of aid to Vietnam during the height of war. Israel today is the strongest nation in the region and it is asking for even more.

Christian Science Monitor
January 30, 1978

The armament of Israel has been carried out since its inception under the auspices of three imperial powers: Britain, France (1954-1967), the U.S.A. (1967-1978). America's military support to Israel may be divided into two phases in terms of weapons supply, a conventional weapons phase and a nuclear armament phase; more specifically

2. The nuclear capability phase.

The generation of the Skyhawk — Phantom phase dominated the scene prior to, during and in the aftermath of the October war. The generation of the F-15 and F-16 was promised to Israel by President Ford as America’s contribution to Israel for the implementation of the Second Interim Agreement on Sinai (Sept. 1975). Today, Israel has received 25 planes of the F-15(1) and it is scheduled to receive 15 more of the same, plus 75 F-16s, subject to Congressional approval or disapproval within a month when the sales package is presented to Congress in mid-April 1978. (*).

According to the International Herald Tribune:(2) “The three-part, package, announced by Secretary of State Cyrus Vance, called for Egypt to receive 60 F-5E shortrange fighters, Saudi Arabia will get 60 F-15 fighters, including 15 training models and Israel will get 15 F-15s and 75 F-16s. From the American point of view the proposed “arms deal” will help to meet the nation’s legitimate Security requirements, will not

(*) The deal was approved on May 15, 1978, by the Senate of the United States by 55 votes against 43.
alter the basic military balance in the region, and will be consistent with the overriding objective of a just and lasting peace”(1).

Yet in spite of these assurances, the announcement caused violent verbal reactions in Israel and pro-Zionist circles in America. Consequently, the State Department had to issue another statement to dispel Zionist fears. It said in part: “In general, we consider the ties between Israel and the U.S. to be enduring and strong. In our view, the decisions contribute to the legitimate security needs of the countries involved, and give them confidence to continue supporting the movement toward a negotiated settlement in the Middle East. The New York Times editorial pointed out that the U.S. was gambling that immediate political benefits would outweigh the long-term military risks and added: “the first Eagles would not reach Saudi Arabia until 1981, and they would not be operational for another year or so after that. Until then, the deal would be halted, as it would be if there were a drastic change of direction in Riyadh”. The Times commented further: “The Carter Administration seems right in calculating that the proposed aircraft sales can contribute to the peacemaking process by strengthening a moderate Saudi regime(2).

The nuclear capability phase became publicly known in the autumn of 1960 when the CIA disclosed that the “textile factory” at Dimona in the Negev desert was in fact a nuclear fission plant built with French assistance. Since then, French Israeli collaboration on the nuclear bomb etc. and Israels’ “theft” of a U.S. uranium shipment have enabled Israel to accumulate at least a dozen nuclear weapons. To put the matter in a nutshell, the former Director of the CIA has indicated that Israel now has at least a dozen nuclear weapons. There is grown Congressional discussion of the possibility these weapons were built using material stolen by Israel from the United States(3).

In addition to the nuclear material, the US has supplied Israel with surface - to - surface lethal missiles - the lance and Pershing—which are capable of delivering nuclear warheads. Needless to say, the Phantoms as well as the F-15s and F-16s bombers are also capable of carrying out the same task.

Although the U.S. - Israeli military relationship is immensely involved, it reached its zenith only in the October War when Israel was not on the offensive, as per usual. That relationship has not declined ever since. Indeed, it attained a high plateau and remained at that level though Israel has recovered and expanded its war arsenal. This ever-growing commitment to Israel on the part of the U.S. is often attributed to the power of the Zionist lobby, or the organic relationship between imperialism and zionism or to the poverty of Arab propaganda and the lack of application of Arab levers of power, such as oil and the purchase of American manufactured goods. Whatever the reasons may be, the critical issue remains that during the October War for instance, U.S. supplies to Israel not only arrested the Arab offensive, but almost reversed it:

“Nixon feared that in the wake of Vice-President Agnew’s resignation in disgrace on the 10th of October, 1973 and the dismissal of Cox and Richardson while Kissinger was in Moscow, accompanied by calls for impeachment, an Israel public complaint of American perfidy over commitments to Tel Aviv might topple his administration. Eventually, 659 sorties were flown delivering 22,500 tons of material(4).

Though Nixon’s decision was motivated by political exigencies, the decision to supply Israel even at the expense of the U.S. armed forces has had its repercussions within army ranks. George Brown, Joint Chief of Staff Chairman, criticized the decision in terms of U.S. global strategy and asserted that “Israel represents a burden to America” especially as regards the diversion of weapons like the Maverick (Smart bomb) and the Tow anti-tank missile to Israel(5).
The entangling alliance between Israel and the U.S. did not disentangle as a result of Pentagon criticism. On the contrary, it increased to such an extent whereby former Senator and Chairman of the Foreign Relations Committee, J.W. Fulbright, could write in the aftermath of the Second Interim Sinai Agreement (Sept. 1975) that the U.S. is “fully responsive to Israel’s military, energy, and economic needs as Israel perceives them”. Fulbright adds, “the cost of this modest pull-back in foreign aid alone, will come to $12.9 billion. This turns out to be some $7.5 million for every square mile of sand to be given up by Israel, more per square mile than we paid for all of Alaska back in 1867”.

Corroborating the same thesis but in terms of military analysis and Israel’s capability to wage aggressive war, the military analyst, Cordesman, underscores the following: “U.S. aid since the October War has built up Israel into a state able to wage aggressive war with minimum risk. Israel is no longer a small state surrounded on all sides by neighbors with large forces, it is a militaristic state whose military buildup has gone far beyond the requirements of defense”.

As regards the acquisition of nuclear weapons and their offensive capability, Cordesman writes: “The deployment of new weaponry since the war has allowed Israel to correct most of its previous imbalance in combined arms. Israel is acquiring large numbers of artillery and anti-tank missiles, greatly improved land-based air defenses, penetration raids, air defense suppression weapons, and tank-killing air munitions necessary to restore the effectiveness of its air force”.

Obviously, the net result of this accumulating military hardware, is Israel’s growing invulnerability to both political and military pressures. And since Israel is supplied within its own context and practically on conditions of its own dictation, it follows that by its own definition of defense requirements Israel is “given the capability to launch lightning offensives against Egypt, Syria, Jordan, or Lebanon before the great powers could intervene, or before an oil boycott could have effect”.

The annual price tag for the support of Israeli military machine on the part of the U.S is in the neighborhood of two billion dollars. Aviation Weekly & Space Technology Journal put the matter succinctly and effectively when it wrote that in the fiscal year 1978, the foreign military sales program approved by the House was $2.1 billion, it "earmarks a lion’s share of $1 billion for Israel." Besides the military largesse, Israel was scheduled to receive $785 million in the form of security supporting assistance which is a mixture of grants and loans for non-military purposes, to maintain the fiscal, economic and political stability of other nations in the interest of U.S. security.

Because of America’s open-ended support and Israel’s own armament industry, the armed forces of Israel have improved 60% in terms of manpower and the Israeli army is “currently involved in a program of reorganization and restructuring aimed at making its component units more efficient than in the past and more suited to the particular requirements of desert warfare”.

Lastly, what is Israel’s own evaluation of the Carter presidency in its first year? Wolf Blitzer, the Jerusalem Post Washington correspondent, admits the following:

“The new administration supported a continuation of nearly $1.8 billion in annual economic and military assistance for Israel, but it failed to approve some long-standing Israeli arms requests, the most important being co-production rights for the sophisticated F-16 fighter bomber.”

But after the Begin July 1977 visit to Washington, the U.S. approved a “$250 million arms package including $107 million to be used in the development of Israel’s new battle tank, the Merkava. The package also contained two hydrofoil naval patrol boats, 18 Cobra attack helicopters and various types of ammunition. Why is Israel getting all the weapons on the U.S. pipeline, while Carter is allegedly attempting to slash the military sales program. Blitzer contends because "Israel’s friends in the Senate managed to convince the administration to include Israel in the special Nato category of U.S. arms
recipients eligible for sophisticated weaponry in May's Presidential Review Memorandum (PRM-12) on limiting foreign sales.

Mr. Blitzer is a little bitter however about the U.S. not giving full co-production rights for the F-16s to Israel, but he expresses satisfaction with America's decision to "go ahead with Israel's scaled-down request for 150 F-16 fighter bombers and 25 additional F-15 fighters."[17]

The decision however, which was made in Jan., 1978, was not announced immediately "so as not to exacerbate relations with Egypt at this critical point".[17] At any rate, the decision is in response to the "Matmon C" plan - a revised ten year projection for Israel's defense needs - which Begin submitted last October for U.S. consideration. That plan has not been disclosed as yet.

As to American - Israeli collaboration in the field of air bases, Etzion, the largest of the three Israeli bases in the Sinai Peninsula lying 15 miles south-west of Eilat, is a joint Israeli-American venture. It was built in the early 1970s at a reputed cost of some $5 billion, most of which was put up by the Americans. It is one of the most sophisticated air bases in the world. Its installations were designed not solely for Israeli use, but for the American airforce as well, and the Americans have used it to fly strategic missions in the Red Sea area and the Arabian peninsula. Etzion and the other Israeli bases in the Sinai Peninsula and Bab-el-Mandeb straits help the Israelis to protect their southern oil and cargo links via Eilat.

References

2. Conie Lorne, Israel's English Broadcast, Feb., 14, 1978/20 hrs Israel's time.
5. Ibid "Eagles to Arabia" p. 6.
11. Ibid p. 36.
13. Ibid. p. 20.
Israeli Nuclear Arsenal

It is widely assumed by analysts that Israel is a nuclear weapon state (NWS) though Israel itself does not admit it officially.

To produce nuclear weapons under government auspices, there are two crucial ingredients: One is the fissile material, uranium or plutonium of sufficient enrichment or purity, the other is people with requisite engineering knowledge and skill. Analysts in this field declare that a good sized power reactor produces plutonium in amounts equivalent to a couple of dozens of nuclear bombs per year.\(^{(1)}\) Israel is known to have at least two reactor centers. The oldest the Nahal Soreq Research Center, is located just south of Tel Aviv in the vicinity of the Weizmann Institute and was purchased from the United States in 1955 under the Atom for Peace Program. The second near Dimona in the Negev Desert was built with French assistance in 1960. Of the two reactors, the one near Dimona is more important in military sense because it is “particularly well suited for producing the fissionable plutonium used in nuclear bombs”.\(^{(2)}\) Indeed this facility is reportedly similar to the American one at Savannah River South Carolina, which has been the source of a large part of the U.S. plutonium stockpile.\(^{(3)}\)

The Israeli Nuclear Program

Preparations for the production of the atom bomb began with the inception of Israel in 1948, Israel extracted low grade uranium from phosphate and developed a new technique for the production of heavy water. This technique was made available to France in exchange for French nuclear technology.\(^{(4)}\)

In 1962, the Israeli Nuclear commission was established under the auspices of the Ministry of Defence and was headed by Ernest David Bergmann who discovered uranium in the Negev Desert. Later in the same year, an agreement was signed by the French and the Israeli Nuclear Energy Commissions for the exchange of information, research and training of experts. At the same time President Eisenhower declared that the U.S.A. did not object to the peaceful use of nuclear energy. This declaration was followed by the conclusion of bilateral agreements on nuclear cooperation between the U.S.A. and 30 other countries including Israel & Egypt.\(^{(5)}\) This allowed Israel later to purchase the Nahal Soreq reactor.

The Dimona reactor was functioning at a 24 MW, and by 1964 yielded enough plutonium for one bomb of the Nagasaki-size, per year, with fissionable material to spare.\(^{(6)}\) Both reactors were not subject to international inspection on the grounds that the Soreq’s output was less than 3 MW, and that the Dimona was alleged to be a textile factory. Later the first was converted to a major center for pure and applied research.\(^{(7)}\)

Not only did Israel get away without international inspection but managed to provide enough quantities of uranium from various sources. Deals were concluded for the purchase of uranium with France, South Africa and other African nations. This went along with other illegal operations, the details of which were published in several western newspapers. Perhaps the most fascinating is the Sheerbourg freigheter operation. In Nov. 1968, 200 tons of uranium were handed over by the German freighther Sherbourg, destined for Italy, to an Israeli ship in the middle of the Mediterranean. In return for this secret deal it was reported that Israel paid $ 3.7 million to Federal Germany in the form of scientific assistance.\(^{(8)}\) In another incident, CIA special memoranda on Israeli nuclear armament revealed that amounts of uranium were stolen from Apollo Plant in Pennsylvania and shipped to Israel over a period of years.\(^{(9)}\) However Israel is trying now to increase its own output of uranium extracted from phosphate in the Negev Desert and the Dead Sea from 10 to 50 tons.\(^{(10)}\) In this way it wishes to become self-sufficient in uranium.

Finally during the late sixties, it is now believed that the Israelis were able to separate plutonium in a separation plant. However, Mr. Leonard Beaton a researcher in this field, believes that the Israelis were able to construct a laboratory-level separation capacity, if so, Beaton conjectures that Israel has a substantially larger amount of irradiated fuel rods. perhaps
enough for about three bombs. than separated plutonium which might now be enough for one bomb. Beaton concludes that Israel has thus acquired a bargaining leverage with the United States by agreeing not to exercise, the nuclear option. He suspects that Israel has used this leverage in negotiating the contract for the 50 F-4s.\(^{(11)}\)

With all of the previous steps achieved the actual production of the bomb is relatively simple.

**Evidence of the Nuclear Weapon in Israel**

The Strategic and Defence Studies Centre in Canberra (Australia) estimated in 1968 that Israel was liable to become a nuclear power by the 1980s.\(^{(12)}\) This was later confirmed in a closed door hearing on the 7th of July 1970 by former CIA Director Richard Helms. He told the U.S. Senate Foreign Relations Committee that the American estimate of Israel's nuclear capability was that it has the capacity to build atomic weapons.\(^{(14)}\) This capacity was estimated in 1974 by the International Institute for Strategic Studies to be sufficient for one nuclear device of between 10 to 20 Kilotons each year.\(^{(15)}\)

A spokesman for the Weizmann Institute further attested to this in 1975 and stated that Israel was the eleventh state to possess nuclear potential and has a delivery system in the form of Skyhawk and Phantom planes and ground to ground missiles.\(^{(16)}\) At the end of 1975, it became known that Israel had approached the U.S.A. for the purchase of American Lance and Pershing ground-to-ground missiles capable of carrying nuclear warheads.\(^{(17)}\)

In the 1970s some Israeli officials advocated the changing of the nuclear option into a declared national foreign policy. On 1 Dec. 1974 then president of Israel Ephraim Katzir, stated publicly "It has always been our intention to provide the potential for nuclear weapons development. We now have that potential. We will defend this country with all possible means at hand. We have to develop more powerful and new arms to protect ourselves".\(^{(18)}\)

Later in 1976 Moshe Dayan, Israel's Foreign Minister stated that as Israel does not always agree with American policy regarding its security and as Egypt has lost its protective Soviet nuclear defence and as Israelis wish to remain in the West Bank he suggested that Israel should go ahead and produce nuclear weapons and adopt a declared nuclear policy.\(^{(19)}\) Such a view was also advocated by former U.S. representative at the U.N. organization Patrick Moynihan. He told the Senate Foreign Relations Committee that it was preferable to let the world know of Israel's owning the nuclear weapon. He further confirmed the report of the CIA Director for Science and Technology Carl Duckett that Israel possesses 10 to 20 atomic bombs.\(^{(20)}\) Time magazine put that number at 13 atomic bombs reporting furthermore that they were actually deployed during the 1973 war.\(^{(21)}\)

Finally it is known that Israel took a negative stand towards the Non-Proliferation Treaty on nuclear weapons (NPT) and to the U.N resolution concerning the establishment of a nuclear free zone in the Middle East. When the NPT was renewed in 1974, 84 states re-affirmed their adherence to the treaty in addition to 22 new states. Israel was one of 7 states that refused to sign it.

**Nuclear Delivery System in Israel**

The present Israeli nuclear strike force consists of the following planes and missiles: \(^{(22)}\)

### Aircrafts

1. **Mirage — III**
   - Payload (i)b a : 2,000 — 3,000
   - Combat radius : 745
   - Speed : Mach 1
   - Origin : France

2. **A4 — Skyhawk**
   - Payload (i)b a : 4000
   - Combat radius : 400
   - Speed : Mach 0.85
   - Origin : U.S.A.
3. F4 — Phantom
Payload (lb): 2,000
Combat radius: 750
Speed: Mach 2

Missiles

Of all threshold states, only India, Israel and Japan have a missile programme under way which could be relevant to the delivery of nuclear weapons over the next few years.

Israel has been interested in acquiring a missile capability for some time. In the 1960s the Marcel Dassault Aircraft Corporation in France developed the MD-660 missile, reportedly both nuclear and conventional-capable, of which some 24 were believed to be produced and some of these delivered to Israel. It is on this basis that Israel has developed the Jericho, a surface-to-surface missile capable of carrying a warhead of 1,000 - 1,500 lb over a 280 mile range. This missile is believed to be in production.

Israel is also equipped with American supplied 155-mm and 8-inch howitzers. These weapons make possible a rapid response to massed troops and tanks.(c) It also has so-called "smart bombs," some varieties of which are nuclear capable and tremendously accurate. They are also highly effective in conventional modes.(c)

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MWe = megawatts, electrical.

n.a. = not available.
References


3. Ibid.


18. Ibid.


Military Collaboration Between
Israel and South Africa

Military collaboration between Israel and South Africa constitutes one of the major manifestations of the deep rooted relationship that exists between those two racist regimes. This collaboration has largely expanded, and in many forms of late in the form of exchange of military expertise, establishment of joint military ventures and involvement in each other's military operations. Data and documents abounded since the early 1970s substantiated such forms of collaboration.

South African Involvement with Israeli Wars:

Several hundred South African volunteers fought with the zionists after November 1947. Food, medical and other supplies were also sent by the South African regime during the 1948 war.

Jewish volunteers from South Africa served in Israel during the 1967 war, officially in non-military posts, replacing Israelis who had been called up for combat duty. The South African Zionist Federation launched a special fund for Israel. In addition, many other sectors of the white South African community became involved in supporting the military effort of Israel.

An estimate of 1500 South Africans, both Jewish and non-Jewish, volunteered to fight in Israel in October 1973. Following the war, hundreds of South Africans went to Israel to replace Kibbutz workers who were still serving in the armed forces.

There were indications that South Africa may have played an even more direct role in the October 1973 war. The Egyptian government announced that a Mirage jetfighter of South African origin had been shot down on the Suez. Daily Telegraph suggested that South Africa had sent several Mirage jets via the Azores to aid Israel. These reports were subsequently denied by both Israel and South Africa.

Counter - Insurgency Collaboration:

An important element of Israel's military collaboration with South Africa has been the sharing of expertise in counter-insurgency operations. A South African mission was reported to have flown to Israel in June 1967 to study the use of weapons and the tactics of lightning strikes during the six day war. After the war, the Chief of staff of the Israeli Air Force visited South Africa to explain in detail the lessons of the war to the South African staff college.

In March 1974, President Kaunda of Zambia accused Israel of sending a major general to South Africa to train her forces in counter-insurgency.

General Meir Amit, Former head of Israel's intelligence services and chairman of Koor Industries, disclosed during a visit to South Africa in July 1975 that senior Israeli military officers visited South Africa regularly to lecture to South African officers on modern warfare and counter-insurgency techniques.

On 3 April 1976, the Johannesburg correspondent of the Daily Telegraph reported that Israeli officers had been closely involved with South African Army planning in the Angolan campaign. According to the report, General R.H.D. Rogers of South African Air Force had stated that one reason why South African casualties in the campaign had been so light was because Israeli techniques for evacuation and treatment of frontline casualties had been closely followed.

Marcia Freedman, opposition member in the Israeli Parliament, asserted in June 1976 that hundreds of Israeli soldiers were attached to South African Army units as instructors and participated in training manoeuvres.

The South West Africa People's Organization (SWAPO) asserted in August 1976 that South Africa was employing Israeli and British mercenaries to help it control a 20-mile wide buffer zone along Namibia's borders with Angola and Zambia. The Movement's President, Mr. Sam Nujoma said in an interview that SWAPO had proof of the presence of Israeli counter-insurgency in the buffer zone. When asked what proof he had of Israeli involvement in Namibia, he said that people
living in villages along the borders had seen the Israelis wearing South African Army uniforms and identified them by their facial features and by the fact that they spoke Hebrew among themselves and appeared to have no knowledge of Afrikaans.\(^{(11)}\)

**Military Equipments and Joint Ventures**

At the end of August 1974, Moshe Dayan and Meir Amit visited South Africa. Amit, president of Koor Industries, visited South Africa again and stated that South African Defence Forces were benefiting from Israel's experience and know-how in the field of military electronics industries\(^{(13)}\). Koor has formed a joint company with the South African Para-statal steel giant ISCOR for the import and distribution of steel in Israel.\(^{(12)}\)

The desire to share in Israel's expertise in military technology and modern warfare was reported to be an important element in Mr. Vorster's visit to Israel in April 1976. Press reports indicated that South Africa was prepared to finance an expansion of Israel's arms producing capacity and even to supply Israel with uranium in return of Kfir jetfighters and other arms. Mr. Vorster denied these reports but toured the Kfir factory. A representative of the Israeli Aircraft Industries was known to have visited South Africa in January 1976. According to the Times, "informed sources" indicated that arms from Israel were already on their way to South Africa even before Mr. Vorster's visit\(^{(11)}\).

In January 1977, officials of the U.S. government stated that Israel had sold six gunboats armed with Gabriel missiles to South Africa. They reported that since these missiles might have been built along the lines of the American Side-winder Missile, the sale might be in violation of United States official policy prohibiting the re-export of arms. A spokesman of the Israeli Embassy in Washington, denied that Israel had sold arms with American components without prior consent from those involved.\(^{(15)}\)

Press reports indicated that Israeli military industries have a backing of about R 100 million in South African orders. It reported that the equipment includes missiles, gunboats and fighter jets.\(^{(16)}\)

According to press reports, Sandhoek — Austral shipyards near Durban in South Africa are supposed to have begun manufacturing Israeli Dabur coastal patrol boats under license from Israel.\(^{(17)}\)

On 9th August 1976, it was announced in Tel Aviv that a group of 50 South African personnel were being trained in Israel to operate Israeli built missile boats. The Israeli radio station said that Israel was building for South Africa two boats of the Rechef class.\(^{(18)}\)

On 20—21 January 1970, the Jewish Telegraphic Agency reported that the South African government was exporting giant 65-ton tanks, designed after the British "Chieftain" tank, to Israel. The Israeli Foreign Ministry refused to comment on the report.\(^{(19)}\)

In the early 1960s, South Africa obtained from a Belgian company license to manufacture the Uzi submachine guns, of Israeli origin. This is now a standard equipment in the South African Army.\(^{(20)}\)

According to information provided by the Anti-Apartheid Movement in the Federal Republic of Germany, Israel appears to be acting as an intermediary for the sale of West German military equipments to South Africa\(^{(21)}\).

On the other hand, Rhodesia officially announced in 1977 its decision to equip its armed forces with the Israeli Uzi submachine gun. The weapon was announced to be manufactured under license in Rhodesia as the Rhuzi. Rhuzi will also be on sale to civilians (whites only).\(^{(22)}\).

**Nuclear Collaboration**

Several observers have expressed concern that the scientific and technological co-operation agreements between Israel and South Africa in 1976, which have established closer ties between the South African Council for Scientific and Industrial Research and the Israeli National Council for Scientific and Industrial Research, may involve the transfer of nuclear know-how. According to a recent report of the Anti-Apartheid Movement in the Republic of Federal Germany, Israel may be
supplying nuclear technology in return of enriched uranium. According to the Morning Star, London, of 11, May 1976, papers delivered at a joint Israeli South African scientific conference in Johannesburg in April 1976 included papers on nuclear physics and isotope chemistry. A testimony that was placed before the Sub-committee on Africa of the Committee on International Relations of the United States House of Representatives, stated that Israel might be assisting South Africa in developing its delivery capability for nuclear devices.

References


6. Ibid. Quoted from Rand Daily Mail, Johannesburg, 10 October 1977.


8. Ibid. quoted from Rand Daily Mail, July 1975 and Washington Post, 8 July 1975.


20. Ibid.


24. Ibid.