

much, making Israeli wage cost per unit of output «lower than in most industrial countries».<sup>43</sup> Rafael Benvenisti, director of the Israel Investment authority, estimates that Israeli engineering graduates earn 40 percent of U.S. salaries. Leon Rieberman, president and chief executive officer of AEL Industries Inc., noted «it is costing us 30 percent of what it would cost us to do the same type of research in the U.S.»<sup>44</sup>

*The Wall Street Journal* reported in 1981 that «Israelis complain that in criticizing Israel's hawkish military policies, the U.S. overlooks the fact that Israel has served as a kind of 'combat laboratory' for U.S. weapons development.<sup>45</sup> *Defense Attache* called Israeli weapons «combat proven».<sup>46</sup> At IAI, an official notes that 'we have people here all the time from U.S. companies and the U.S. military studying our experience.' » An IAI official added, «An engineer here knows that what he produces, he or his son will fight with».<sup>47</sup>

Moshe Arens, the new Israeli defense minister, was an aeronautical engineer for the Curtiss-Wright Corp. before he emigrated in 1957.<sup>48</sup> By 1959, he opposed Ben Gurion and Eshkol because they were not moving quickly enough, in his judgement, to develop Israeli nuclear weapons. In 1960, with a former commander-in-chief of the Israeli Air Force, he founded Elron. He participated in the development of the Arava transport and received the «Israeli Prize for Security» in 1971 for reasons which remain secret to date. He is also a director of Israel Aircraft Industries, a strong backer of the Lavie (formerly called the Aryeh)<sup>49</sup>, and helped negotiate the U.S.-Israeli accord on strategic cooperation.<sup>50</sup> Arens cites three advantages of the Israeli defense industry that he says the U.S. will never match, according to *The Wall Street Journal*, «the experience of workers who are nearly all members of Israel's military reserves; lower costs, because of salary levels that are about half those in the U.S.; and speed in development of weapons systems».<sup>51</sup>

## U.S. Arms Purchases from Israel

In fact, conditions are so profitable that the U.S. government itself has extended many contracts to Israeli arms manufacturers, provoking complaints from their U.S. counterparts. The General Accounting Office responded that the Buy American Act permits «preference for suppliers of domestic end-products but does not require that bidders offering foreign end-products be rejected».<sup>52</sup> In any case, Israeli arms manufacturers are exempted both from Buy American restrictions and from import duties.<sup>53</sup> U.S. Defense Department purchases from Israeli firms for aviation and computer goods went up from 26.5 percent of Israel's exports to the U.S. in 1978 to 37 percent in 1980.<sup>54</sup>

An interesting illustration of this trend is the McDonnell Douglas F-15. In 1977, the Israelis were refused coproduction rights. But by 1979 over \$20 million worth of F-15 parts were Israeli made. Certain F-15 parts, such as gun access panel doors, are now manufactured only by Israeli companies as subcontractors for McDonnell Douglas. One of the largest pri-

vate Israeli firms, Cyclone Aviation Products, thus produced parts for F-15's delivered to the Saudis over apparently vociferous Israeli opposition.<sup>55</sup> The Israelis were well-compensated after this «defeat».<sup>56</sup> In another case, Tadiran signed a \$93 million contract to supply electronics equipment directly to the Department of Defense.<sup>57</sup>

According to the *Financial Times*, Professor Ezra Sadan, director-general of the Israeli Treasury, reported to his government on March 22, 1981, «that during talks in Washington [the week before] he found a very receptive ear to the suggestion that Israel could provide the U.S. with some of the equipment needed for reinforcing the U.S. army». The story continued, «One area where the Israelis are most hopeful is in providing the equipment and knowledge it has developed in desert warfare to the U.S. rapid deployment force, which will be expected to fight in desert conditions in the Middle East».<sup>58</sup>

In April 1983, Assistant Secretary of Defense Richard N. Perle recommended the U.S. Army purchase weapons from an Israeli company. One year before he had been paid \$50,000 as a consulting fee by the same company.<sup>59</sup>

## Arms Production and the Israeli Economy

Israeli arms exports and total exports are classified figures, but estimates from the Stockholm International Peace Research Institute indicate as much as 40 percent of total Israeli exports consist of military supplies and services.<sup>60</sup>, an estimated \$2 billion in sales in 1982 according to a 1981 projection by Deputy Minister of Defense Mordechai Tzipori.<sup>61</sup> Ya'acov Meridor told Israel Bond officials in Jerusalem, «We consider that, on the road to our economic independence, we can increase in the next four years the weaponry exports by an additional \$2 billion».<sup>62</sup> Military exports, according to a 1982 article in *Ha'aretz*, accounted for 60 percent of Israeli steel, electrical, and electronics exports over the previous five years. Although the slowdown in the world economy has hurt Israeli arms sales somewhat, in 1983 some Israeli economists advocated *reducing* arms as a percent of total exports to 25 percent.<sup>63</sup> In fact, industrial exports, not including diamonds, are expected to grow from 30 percent of exports a decade ago to two-thirds, according to Avraham Ashieri, director-general of the Industry and Trade Ministry.<sup>64</sup>

In 1975, Israeli military exports were about \$150 million, approximately 15 percent of total exports and double the previous year.<sup>65</sup> As recently as 1977, Israeli arms exports totaled only \$285 million. By 1980 Israeli firms collectively, with \$1.25 billion in world arms sales,<sup>66</sup> were the single largest arms exporter to sub-Saharan Africa and to Central America. In 1982, the CIA ranked Israeli arms exports at fifth in the world,<sup>67</sup> after the United States, the Soviet Union, France, and Britain. The Israelis had apparently passed West Germany and Italy, ranked ahead of them in a 1981 *New York Times* report.<sup>68</sup>

Begin's special assistant for economic coordination, Ya'acov Meridor, confidently predicted in 1981 that over the following four years Israel would increase «weaponry exports