

## South Korea: Goals and Strategy for Building Defense Industries

### *Introduction: Defining a Defense Industrial Strategy*

South Korea plays a major role in U.S./Asian collaboration, and while its views of goals and strategies share some similarities with those of the Japanese, there also appear to be marked differences, including differences over the U.S. role over the last 25 years.

Like the Japanese, South Korean Government and industry leaders seek to increase the percentage of weapons and military equipment produced locally, but they do not appear to aim for an independent defense industry with minimal or no foreign involvement. South Korean leaders speak of a growing partnership between South Korean firms and foreign companies, especially U.S. companies, in producing weapons systems, and they have outlined three elements of this "partnership strategy."

One is to develop a significant role for Korean firms as a supplier of components and parts to major U.S. defense firms that produce in the United States, South Korean leaders stress the advantages of Korean firms supplying components and parts at reduced costs, as major U.S. defense corporations face declining U.S. defense budgets, fewer contracts, and a greater need for efficiency and cost-cutting. This would allow American firms to retain the leading edge in developing advanced technology while economizing on standard parts and components through subcontracting with Korean companies.

South Korea has instituted an offsets policy toward U.S. suppliers similar to those of Japan and Western European countries as an inducement to influence U.S. firms to subcontract for Korean-produced components and parts.

Exports are a second element of the "partnership strategy. The South Korean Government and the United States have been at odds since at least the early 1980s over South Korea's desire to export weapons and military equipment made under U.S. licenses. This pro-export policy, which contrasts with Japan's ban on arms exports, potentially could create a new source of competition to U.S.-produced weapons in world markets. The U.S. Government often has vetoed proposed South Korean sales overseas. Over some periods, more than 50 percent of applications for third country exports have been denied. Not surprisingly, U.S. defense firms generally favor such restrictions.

South Korea hopes to change U.S. policy by helping American firms gain a more competitive position in the world arms market through coproduction of weapons with South Korean industries. In their view, U.S. companies should be attracted to South Korea because of its lower production costs, which will become increasingly important as the world arms market shrinks in the 1990s (if East-West tensions decline fundamentally and regional conflicts continue to abate), and as European and Chinese arms manufacturers continue to cut into traditional U.S. markets, such as Southeast Asia, the Middle East, and Latin America. According to South Korean spokesmen, U.S. firms would control the marketing of weapons manufactured inside South Korea under coproduction deals.<sup>1</sup>

A U.S. role in developing of Korean aerospace industry constitutes the third element of Seoul's partnership strategy. The Seoul government's Aerospace Industry Development Plan calls for South Korea to be a serious participant in the world aerospace market by the year 2000. The strategy for achieving this appears to be two-fold:

1. building up the role of South Korean companies as suppliers and parts to major aircraft manufacturers in the United States and possibly Western Europe, and
2. bringing these U.S. and European firms into collaborative arrangements for coproduction of aircraft and broader support for the Korean manufacturer of components or entire systems.

Again, South Korea seeks to attract U.S. aerospace company participation with prospects of lower production costs and thus a more competitive position in world markets.

South Korean Government and industry leaders clearly expect that the coproduction of the FX fighter plane will be a first step toward the aerospace business. The government's selection of the U.S. F-18 fighter over the F-16 had a military rationale (the South Korean Air Force reportedly favored the F-18 because of maneuverability and armaments), but the government also reportedly viewed McDonnell Douglas as better suited to assist South Korea's aerospace industry than General Dynamics, the producer of the F-16. McDonnell Douglas' sales approach to the government stressed the *company's* production of a full line of military and civilian aircraft and helicopters, the future purchase of Korean-made parts for McDonnell Douglas helicopters, and broader assis-

<sup>1</sup>Park Young-Koon, "ROK-U.S. Defense Industry Cooperation—Past Achievements and Future Tasks," paper presented at the Fourth ROK-U.S. Defense Industry Conference, Jan. 16, 1990, p.5.

tance “designed to transfer key technologies to Korea in an efficient, building-block approach.”<sup>2</sup>

Korean industry spokesmen view the role of McDonnell Douglas as assisting South Korean participants in the FX project to design and plan future aircraft. An official of Samsung Aerospace Co., the main South Korean participant in the FX project, has stated that the U.S. partner in FX coproduction will be asked to assist Samsung in designing an “interim aircraft” which could be a light transport aircraft, a helicopter, or a sub-sonic jet trainer.<sup>3</sup>

The Samsung officials also gave a broader set of objectives in the development of an aerospace industry: reaching parity with the developed countries in the manufacture of airframes and engines by the early part of the 21st century; and reaching, sometime after that, parity in the manufacture of avionics and other specialized systems and in the development of advanced systems.<sup>4</sup> He also made clear that government, industry, and the scientific community would work together towards these goals.

### ***Motives Behind the Partnership Strategy***

South Korea’s partnership strategy stems from a basic motive to maintain a viable domestic defense industry. Long-term South Korean thinking envisages a completely independent defense production capability without foreign participation. Even that, however, is tempered by the uncertainty of Korea’s security situation in the next century surrounded as it is by three big powers, China, Japan, and the Soviet Union, all of which historically have had aggressive designs on Korea. South Korea thus may well seek a long-term security link to the United States, which undoubtedly would influence defense industrial policy.

The formidable North Korean military threat and possible U.S. troop withdrawals in the future provide strong reasons to South Koreans for the development of a viable defense industry in the nearer term. A “viable domestic defense industry” apparently means one that can provide the essential needs of the South Korean armed forces, produce more advanced systems, and be economically profitable.

South Korea already has made some progress toward fulfilling domestic military requirements. By the mid-1980s South Korean industries were turning out a wide array of combat equipment. Major items were the K2 rifle, the Hyunmu surface-to-surface missile, 155mm self-propelled howitzers, destroyers, fast attack patrol boats, the 500MD helicopters, and the F-SE fighter aircraft. By

the end of the decade, the Type 88 tank was rolling off South Korean assembly lines. There presently are 100 major defense firms designated by the government and several thousand subcontractors involved in producing military equipment. Nevertheless, by 1990 domestic firms supplied only 55 percent of the arms purchased by the South Korean Government, and much of this was produced under licensing arrangements with U.S. firms. The Seoul government imported the rest, mainly from the United States. Dependence on imports is especially important in aircraft, missiles, and communications equipment.

South Korea lags far behind Western countries and Japan in defense research and development. In contrast to the situation in Japan, South Korean firms have not yet devoted large resources to military R&D and South Korean defense budgets in the 1980s have devoted only about 1.6 percent of expenditures to R&D. The Government hopes to encourage industry to engage in meaningful R&D, but for the foreseeable future, South Korea will remain dependent on foreign technology.

Creating a profitable defense industry has proven an even more difficult goal. South Korean defense firms have operated at below 60 percent of capacity for most of the period after 1984. Government procurement has not been sufficient to bring about a more efficient utilization of production capacity, a situation that will continue, especially since the emergence of a more democratic political system in 1987 has produced political pressures on the government to spend more in the civilian sectors and restrain defense budget increases.

Herein lies the pressure to export, either as suppliers of components and parts to Western defense firms or as suppliers of entire weapons systems to developing countries. The goal of exporting is key to understanding South Korea’s partnership strategy. Foreign participation will enhance the range of potential arms exports, and the involvement of American firms in coproduction would help break down U.S. opposition to the overseas sales of U.S.-designed weapons and equipment.

### ***Preference for U.S. Participation***

South Korean Government and industry leaders clearly prefer to collaborate with U.S. firms. Security is a primary consideration. The North Korean military threat is indeed formidable: North Korea possesses armed forces of over 1 million, an Army of over 800,000, 540,000 reserves that can be mobilized within 12 hours, 3,500 tanks, and over 4,000 heavy artillery pieces and rocket launchers. The bulk of North Korean ground and air forces are positioned

<sup>2</sup>Damon Darlin and Andy Pasztor, “Seoul Picks McDonnell Douglas to Build Fleet of Jet Fighters in \$3.4 Billion Deal,” *Asian Wall Street Journal Weekly*, Dec. 25, 1989, p. 19; Jeff Shear, “Congress Huffs, Puffs as Seoul Seeks to Build Fighter Planes,” *Washington Times*, Oct. 12, 1989, p. C-1.

<sup>3</sup>Kim Choe-su, “ROK-US Cooperative Programs: KFP and I-I X,” paper presented at the Fourth ROK-US Defense Industry Conference, Jan. 16, 1990, pp. 13-14.

<sup>4</sup>*Ibid.*, pp. 12-13.

near the demilitarized zone. South Korea's defense problems are complicated by the location of Seoul, only 30 miles south of the demarcation line.

It is not clear whether North Korea's future policy will be influenced fundamentally by the changes in Eastern Europe and the Soviet Union. Clearly, the North Korean leadership feels the impact of the changes, but its reaction has been to reject them and maintain the rigidly totalitarian system of leader Kim Il-sung. The regime apparently views the post-June 1989 political repression in China as a favorable development, countering the trends in Eastern Europe and the U.S.S.R.,

The South Korean Government, therefore, still sees a prolonged, North Korean threat, and it continues to seek an American military presence in South Korea as a counterweight and deterrent to it. Moreover, the integration of U.S. and South Korean forces on the peninsula provides a rationale among South Korean and U.S. military leaders for common weapons systems.

In addition, there are strong precedents for U.S. support of South Korea's defense industries. The U.S. Government offered over 800 technical data packages to South Korean firms from the early 1970s until 1986, and over 100 were utilized. These provided data necessary for the Korean companies to set up facilities and equipment to manufacture specific types of weapons and equipment. U.S. Foreign Military Sales credits helped to finance the establishment of production facilities.

Licensing and coproduction agreements emerged in the 1980s. Weapons produced under these arrangements include the M109 howitzer, the F-5E fighter, and the 500MD helicopter, motors, machine guns, communications equipment, and small arms. The K-88 "indigenous tank," was designed with help from General Dynamics.

Despite this preference for the United States, in the future U.S. systems will probably not be automatically selected. European defense firms have begun to bid hard for business in South Korea, and this likely will increase in the 1990s. If European firms and governments are flexible on issues like technology transfer, exports, and offsets, their attractiveness to the South Korean Government and industry could present a competitive challenge to the United States. The recently concluded deal for South Korea to acquire German submarines (which may involve coproduction) is indicative of the emerging European role in South Korea's acquisition of weapons and equipment.

### *The Emerging U.S. Debate*

The proposed coproduction of the FX fighter has opened a debate in the U.S. over the extent to which the United States should support South Korea's defense industries.

Proponents of the FX deal, including executives of General Dynamics and McDonnell Douglas, argue that they already have fighter coproduction arrangements with a number of other countries and that U.S. firms will be able to stay well ahead of any potential *competitors in the* production of advanced fighters. They warn that South Korea may turn to European aircraft producers if the FX coproduction proposal does not materialize. Finally, they assert that the prospects of declining U.S. defense budgets make cooperative deals with foreign companies necessary for the financial health of the U.S. military aircraft industry.<sup>5</sup>

Critics of the deal argue that the proponents may underestimate South Korea's ability to develop an indigenous fighter by the end of the century if it is able to draw on the technology and production know-how of an advanced U.S. fighter. They also assert that even an inferior South Korean indigenous fighter could cut into U.S. markets in developing countries because of lower prices.

The proponents and critics have clashed, too, on the deeper issue of the role of the U.S. aircraft industry in the globalization of aircraft production in the 21st century. In the case of South Korea, critics accuse U.S. firms of being willing to help that country develop a full-fledged defense and aerospace industry, first by producing parts for aircraft and other weapons systems manufactured in the United States and then by producing aircraft in South Korea itself. McDonnell Douglas and General Dynamics may represent the view of other major American defense companies when they assert that U.S. companies must be involved in the globalization of aircraft production. They cite profits to be gained from such assistance to countries like South Korea (in contrast to a likely shrinking U.S. market) and cost benefits in shifting the production of components overseas.

In the aftermath of the bitter dispute over the Japanese FSX fighter, the emerging debate over the South Korean FX fighter may clarify the differing views of U.S. defense companies and opponents of such deals: the former argue for global interdependence and the ability of U.S. firms to prosper in that environment, and the latter argue that interdependence will cause American companies to lose their competitive advantage, and that self-sufficiency will ensure a continuation of American supremacy.

<sup>5</sup>Jeff Shear, *op. cit.*, footnote 2.