Early Indicators: ROK Long Range Missile Capabilities

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Recent media coverage of North and South Korean missile programs (see the Nov. 16, 1999 NAPSNet Daily Report) makes no reference to the past history of these activities. A full historical account cannot be provided here, but is available in published reports that are accessible in any good library.[1]

However, readers of the Daily Report may be interested in early indicators of ROK interest in acquiring long range missile capabilities.

The ROK missile development program began under President Park Chung Hee when the ROK Research Agency for Defense Science was established in May 1971 to increase defense industrial self-sufficiency. Part of this agency's purview involved allocating scarce personnel and laboratory resources to guided missile weapons. [2]

According to the 1975 CINCPAC Command History:

On 6 May 1975 the American Embassy, Seoul reported Korean interest in expediting establishment of an in-country Lockheed Rocket Propellant Plant to round out their missile maintenance capability. The cost of the plant was estimated at $5 million. By November 1975 the plant was being dismantled for shipment to Korea with installation completion due in October 1976. This plant, combined with follow-on technical assistance, would allow the ROK to reload HAWK and NIKE-HERCULES rocket motors by CY 77. [3]

In December 1975, the ROK Government reportedly purchased the Lockheed Aircraft Corporation's complete facilities for manufacturing solid-fueled rocket motors. Most of the production equipment

of the now defunct Lockheed Propulsion Company (then near Redlands California) was shipped to the ROK. The ROK paid 2 million US$ for the equipment that produces motors for only two purposes: either for propelling military missiles and rockets; or for space launch rockets.

Lockheed had tried unsuccessfully for more than a year and a half to obtain US Government approval to the sale, and to set up a training program to teach ROK personnel how to manufacture solid rocket propellant, the same kind used in US Minutemen and Polaris missiles. Lockheed later dropped the plan to provide training and technology transfer to the ROK, and sold its plant to the Berkeley-based Pacific International Corporation which managed to obtain a US Department of Commerce license to export the equipment to the ROK. [4]

In 1979, the ROK military continued to seek additional ballistic missile capability when it tried to acquire US Atlas Centaur IRBM technology. First deployed by the United States in 1959, the Atlas Centaur could lob a W-38 warhead over 7,000 mile km with a one mile accuracy.

It is unclear whether this effort was ever realized as an actual transfer, or was blocked by the State Department under pressure from the US Congress. The attempted sale reportedly included nose cone materials, alloys, guidance systems, specifications, engineering drawings, instructions, and assembly equipment. [5]

Although these efforts apparently wound down in the early eighties, they revived under the rubric of an ROK space program; and under on-going efforts to develop longer-range rockets of various kinds.

Thus, the latest coverage should come as no surprise to analysts who pay careful attention to history. In the long run, the ROK's advanced aerospace, military, electronic, and space industrial sectors enable the ROK to step sideways onto the missile proliferation ladder when and if it chooses to do so. Thus, the ROK arguably presents a much more important arms control challenge than the DPRK's artisanally produced, crude missiles.

[1] See P. Hayes, "The Two Koreas and the International Missile Trade," in W. Potter and H. Jencks, The International Missile Bazaar, The New Suppliers' Network, Westview Press, Boulder, 1994, pp. 129-161.

[2] CINCPAC Study Team, An Evaluation of Possible U.S. Support to Republic of Korea Research, Development, Test and Evaluation Activities, Honolulu, May 25, 1971, pp. 16; E-7.

[3] CINCPAC, Command History 1975, volume II, p. 434.

[4] "South Korea Summary Report," DMS Market Intelligence Report, Greenwich Connecticut, 1978, p. 12.

[5] Rep. A. Beilenson, letter to US Secretary of State, August 20, 1979; released under US Freedom of Information Act request

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