The sinking of an Israeli destroyer by an Egyptian SS-N-2 cruise missile (acquired from the Soviets) in 1967 led to renewed US interest in cruise missiles, and research programmes in short-range cruise missile technology were initiated. The short-range US ALCM and SLCM programmes of the early 1970s quickly spawned long-range counterparts, primarily because of a new ability to miniaturize. Smaller, more efficient engines requiring less fuel made possible a reduction in the size of the missile itself, as well as enabling it to cover longer distances. This meant that the ALCM could extend the range and flexibility of the bomber leg of the triad by providing a greater standoff capability. That is, the bomber can launch its missiles while remaining outside the radar range of the enemy's air defence network. The missiles still have sufficient range and accuracy to hit important military targets.

As a further advantage, the small size of the missile coupled with its ability to fly at low altitudes makes it very difficult to detect on radar. Consequently it is very difficult and costly to construct a defence against cruise missiles.

Both the long-range ALCM and the SLCM have become major US weapon systems. The Soviet Union has been slow to follow the US lead in this area but is certainly doing so now, with an estimated 400 ALCMs. The Soviets have also been developing long-range SLCMs while continuing deployment of short-range versions of both types of missile.

Table 1 Current Soviet and US Strategic Nuclear Forces[1]

USSR	Launchers	%	Warheads	%
ICBM	1,392	56	6,846	61
SLBM	928	38	3,232	29
ALCM Bombers	55	2	440*	4
Bombers	100	4	730	6
	2,475		11,248	
SLCM(SS-NX-21/24) estimated 3,000-km range	?			

* assumes maximum loading of 8 missiles/bomber

US	Launchers	%	Warheads	%
ICBM	1,000	51	2,310	18
SLBM	640	33	5,632	43
ALCM Bombers	144	7	1,614	12
Bombers	161	8	3,456	27
	1,945		13,012	
SLCM(Tomahawk) 2,500-km range	328			

SALT I

The first Strategic Arms Limitation Talks (SALT) began in November 1969. As noted above, the Soviet Union had a number of short-range air- and sea-launched cruise missiles at that time and the US had only a very few obsolescent air-launched missiles. Cruise missiles were a topic of discussion but did not play a major role in the negotiations.

In April 1970, the United States sought an upper limit on all SLCMs except those of a very short range. The Soviet Union argued that the missiles were tactical anti-ship weapons and should not be included in negotiations on strategic arms. Final agreement on a ban on strategic or intercontinental cruise missiles with no limits on short-range cruise missiles was within reach but was put aside when the negotiations ceased to aim for a permanent treaty and began to pursue an interim treaty.

In budget hearings during 1973, the inability of the United States to achieve limits on SLCMs at SALT I was used as a rationale for the US Department of Defense to pursue its own SLCM programme. The link to the upcoming SALT II negotiations and the development of the SLCM as a bargaining chip was explicit. One Navy official, Admiral Elmo Zumwalt, stated:

> The signing of the SALT agreements . . . left us in a situation in which the Soviet Union had a large number of cruise missiles and the United States had zero. This was a very unhealthy situation . . . and made it mandatory for the US, . . . to have something with which to negotiate.[2]

SALT II

The SALT II negotiations began in November 1972, six months after the signing of SALT I. Just as the negotiations were beginning, the US Congress was asked to approve $15.2 million in funding for the long-range cruise missile. The Senate refused on the grounds that no role had been established for the missile. A later compromise of $2.5 million gave the programme its start.

The Vladivostok Accord

Little substantive progress was achieved during the first two years of the SALT II negotiations. In November 1974 US President Gerald Ford and Soviet General Secretary Leonid Brezhnev met in Vladivostok in an attempt to give some impetus to the talks. In what became known as the Vladivostok Accord they managed to establish a framework for negotiation involving a ceiling of 2,400 on strategic launchers and heavy bombers. A sub-ceiling of 1,320 MIRVed (multiple independently targetable re-entry vehicles) missiles and a further sub-ceiling on heavy missiles were also agreed. Air-launched missiles were to be counted against the 2,400 launcher ceiling if they had a range exceeding 600 kilometres.

Although the accord was a breakthrough in the