MARCH 72







DEFENSE INTELLIGENCE AGENCY

Soviet and Peoples Republic of China Nuclear Weapons Employment Policy and Strategy





the same is

35883





TC5-654 775-72

PEOPLES REPUBLIC OF CHINA

NUCLEAR WEAPONS EMPLOYMENT POLICY AND STRATEGY

ANNEX A: Force Development and Deployment

503

11178-78

.

General

In general, the deployment and development of the People's Republic of China's (PRC) armed forces in response to external crises has not been dramatic. A possible reason for China's apparent irresponsiveness to external crisis may be simply that it has not had the flexibility or capability to respond to shifting external events, with internal considerations, such as the Great Leap Forward and the Cultural Revolution, being far more demanding or limiting than external considerations. (U)

Other than the movement by Chinese Communist ground forces to Korea (25 armies by mid-1952) and to the Fuchou coastal area (two armies in 1958 and two-plus armies in 1962), the ground force deployment of five armies from South China northward towards the Sino-Soviet border in late 1969-early 1970 represents the largest troop movement since the end of the China Civil War in 1950. Air and naval force deployments have remained relatively stable even in the face of apparent increased external threats. China has traditionally positioned the bulk of its forces in and around vital areas and along principal lines of communications, reflecting a defensive oriented military posture designed to cope with external threats from any direction.

To cope with the external nuclear threat, a campaign was initiated in 1959 to disperse and harden military TCS-054775-72 installations. This was clearly a passive defensive strategy

-

undertaken to reduce the effects of a nuclear attack. China's lack of a nuclear capability dictated the necessity for such a campaign. In the early 1960's, this campaign was expanded to include heavy industries. The attainment of a nuclear capability in 1964 did not lessen the pace of dispersal and hardening, and the "war preparations" campaign of 1969 broadened the scope of such activities to include civil defense measures to protect the population. (U)

Likewise, external developments have generally had little effect on the development of the Chinese Communist missile program with the possible exception of the Sino-Soviet Border Dispute of 1969. Deteriorating border relations with the USSR as early as 1968 may have caused the Chinese to re-think their missile strategy for deployment of an MRBM system. In August 1968, MRBM (CSS-1) troop training exercises were initiated at the Shuangchengtzu Missile Test Range (SCTMTR), and to date there have been 14 confirmed crew-training firings. Although there are only two detected SS missile sites, near Kunming City in Yunnan Province, South China, the Chinese could have deployed 15 or more missiles to other undetected areas, possibly most confronting the USSR.

Other missile system developments may have been influenced by the border incidents of 1969 -- IRBM (CSS-2) firings from Wuchai (at least 14 to 16 CSS-2 firings; possibly two of these in 1971 associated with training) and the Chingyu missile from Chingyu in November 1970 and 1971. The CSS-2 has many advantages -72 including a greater range (1,500 nm) over the CSS-1 and it is likely to be deployed in much greater number with deployment possibly having begun in late 1971.

The Chingyu missile is believed to be a two-stage variant of the CSS-1 with a longer-range capability providing the Chinese with an improved strategic posture. This system with a range greater than 3,000 nm would reach targets in European Russia and give the Chinese a considerable degree of latitude in choosing deployment areas. The IOC for this system is not expected until 1974 or 1975.

The only missile that could be a direct threat against the US is a 6,000 nm-range ICBM. The Chinese flight tested a vehicle with ICBM characteristics to a reduced range in September 1971. The earliest possible IOC for an ICBM based on this vehicle would be late 1974, but more likely a year or two later.

Ground Force

In mid-1950, CCA strength was estimated to be 2.3 million. These personnel were organized into four "Field Armies" and one "Military Area" consisting of 19 "Army Groups." A total of 69 "Armies" were assigned to these "Army Groups." (U)

 and early 1953. By late 1954, only 11 "Armies" remained in Korea. (U)

During the period of intervention in Korea, the CCA was reorganized along more conventional lines. Almost one-half (32 of 69) of the previously-designated "Armies" were deactivated during this period and their personnel absorbed by the remaining units. By October 1964, the deployment of Army-level units was as reflected in Table 1. (U)

Between 1954 and 1960 the remaining 11 armies were withdrawn from Korea and redeployed principally to Northeast, North and East China areas, so that by 1 April 1960, the deployment of Army-level units was as depicted in Table 1. (U)

As shown in Table 1 deployment of army-level units of the CCA remained rather surprisingly stable during the period following the Korean War despite the Taiwan situation, the Gulf of Tonkin incident, the US buildup in South Vietnam, the cultural revolution and the Sino-Soviet border disputes.

In 1971, two additional army-level units were formed bringing the total to 36. Some redeployment was noted and the number of armies in Peking IR increased by two. Army strength for selected years is shown on Table 4.

At present, the PRC Navy is to all intents and purposes a coastal defense force which does not possess nuclear weapons. Naval nuclear strategy appears to be one of

11-A-4

survival in the event of a preemptive nuclear attack. (U)

The development of the navy since its formation in 1949 has been spectacular. From a heterogenous collection of World War II vessels left by the Chinese Nationalists in 1949, the force has expanded to a current strength of 1,235 units (Table 2). However, this expansion can nonetheless be attributed to a normal growth pattern and cannot be related to any external stimuli. To comply with a nuclear strategy of survival, the growth of the force necessitated a concomitant need for support and dispersion. ChiCom naval shore facilities have steadily developed matching overall naval growth. From an approximate total of eight facilities in 1949, naval infrestructure now totals more than 170 shore facilities located throughout the three fleet areas.

Since 1963 at least, the Chinese have embarked on a program of providing a number of naval bases with underground facilities. At least 16 bases located throughout the fleet areas have in various stages of completion, underground facilities suitable for entry, berthing and repair of either boats or submarines. The function of the underground installations appears to be two-fold. They provide protected berthing to effect minor repairs as well as storage for missiles, ammunition and logistics. The dispersed location and reinforced construction will improve PRC naval chances of survival in the event of preemptive nuclear strike.

II-A-5

Air Force

Communist China's strategic air capability is limited to a small force of medium bombers assigned to the Chinese Communist Air Force (CCAF) 4th Independent Regiment (4th IR). A portion of China's 350 aircraft jet light bomber force could be used in a limited strategic role; however, the IL-28 BEAGLE's low performance envelope mitigates against its use for strategic bombing.

The 4th IR came into existence with the delivery of 10 TU-4 BULL propeller medium bombers to Peking in February 1953. In following years three more of these aircraft were acquired from the Soviets, and in January 1959 China received two TU-16 BADGER medium jet bombers from the USSR. China began producing the BADGER at the Hsian Airframe Plant in 1968 and now has 32 BADGERs in the operational inventory in addition to 12 BULLS. An additional 19 BADGERs have been produced but have not yet been turned over to the 4th IR.

1836

From 1953 until 1971 the 4th IR had only three home bases. The original 10 BULLs remained at Peking from February 1953 until March of that year when they moved to Shihchiachuang Takuotsun. They remained there for one year, moving back to Peking in March 1954. Then in February of 1955 the unit moved to Wukung, its present home base. From 1955 until 1971 all 4th IR aircraft were based at Wukung; however, since mid-1971 the BULLs have been at Manshui Airfield and since late-1971 six BADGERs have been at Tatung Chingshuiho. It is possible that Manshui and Tatung now house 4th IR

्रा

aircraft on a permanent basis with the expansion to these bases made necessary by continued production and deployment of BADGERs. In addition to 4th IR home bases, aircraft fromthis unit have operated for short periods of time from numerous other airbases in China. The BADGERs have been detected operating from Kucheng, Huaite, Shuangchengtzu, Wushihtala, and possibly from Wuwei, Nanching Tachiaochang, and Kaerhmu.

There has been no apparent relation between disposition of 4th 1R aircraft and international events; however, the move in 1955 from Peking to Wukung may have been for defense purposes -- to improve survivability in the event of air attack.

Medium bomber crew training began almost immediately upon receipt of BULLs in 1953 and progressed steadily until extensive long-range night bombing training was noted in late 1954. By 1956, BULL crews were considered proficient in medium altitude bombing under instrument flight conditions.

The intelligence picture for 4th IR BADGER training activity is not so complete as for BULL crews. BADGER flight activity was first detected in July 1962. Since that time detected flight activity has been sporadic yet increasing. Night flight activity was not noted until 1970. The first confirmation of BADGER bombing training was provided by satellite photography on 13 August 1971 when a BADGER was photographed exiting the Hsingjenpao bomb range. Subsequent COMINT reporting has identified BADGER activity that began The first section of BADGER backwas

11-A-7

in 1969 and has continued over this range as bombing training. Recent intensification of this training coupled with the highest noted altitudes for BADGER activity -- 41,000 feet -- confirms China's serious intent to develop a strategic. strike capability.

In addition to normal training missions, 4th IR aircraft have been used for a variety of secondary missions. BULLS may have been used against Tibetan dissidents, to shadow intruding CHINAT aircraft, in air defense exercises, and for aerial survey missions. BADGERs were used extensively in 1970 for air defense exercises in Northeast China. Both BULLS and BADGERs have been associated with special weapons programs. In addition to participating in nuclear tests both as drop aircraft and in air sampling roles, BULLS and BADGERs have been photographed in the air-to-surface missile area of the Shuangchengtzu test center.

Little is known of China's strategic delivery tactics. In fact, they are probably still in the process of formulation. An analysis of the latest bombing training indicates that they may intend to attack a target in 2-3 ship cells, each cell approaching the target from different directions and at widely-separated altitudes, and with the lead plane in each cell several minutes ahead of the others.

Communist China's strategic air capability is limited by old aircraft and a small inventory. While BULL crews are believed to be highly proficient in both day and night

TCS-654775-78

2313

operations, the aircraft is highly vulnerable to virtually all air defense weapons. Proficiency of the BADGER force as a whole is assessed as fair for medium to high-level daylight bombing and poor for night operations. The TU-16 does not have a low-level capability. With continued training, the BADGER force will likely reach a high degree of proficiency in high altitude bombing under instrument flight conditions. However, the BADGER is extremely vulnerable to modern air defense weapons systems and would be hard-pressed to survive in the air defense environment over the Soviet Union. China's medium bomber force does not presently have an airto-air refueling capability; however, it is considered within the PRC's technical capability to develop one.

In summary, deployment and development of China's strategic air force has not been governed by external events with the possible exception of defensive positioning of the force in central China. This lack of response to external events is not isolated to the 4th IR but has been true of China's air defense and tactical air units also. As a primary defensive force, China has traditionally positioned the bulk of her air defense and tactical air units in and around key areas with little change in posture ever evidenced because of apparent increased threats. (See Table 3)

Missile Force

External developments have generally had little effect on the development of the Chinese missile program with the

II-A-9

possible exception of the Sino-Soviet border incidents. The cultural revolution did not have any apparent effect on the Chinese missile program.

The MRBM (CSS-1) test program is believed to have ended with the firing of a nuclear-tipped missile in October 1966. The MRBM was then believed to have been ready for operational deployment. From 1967 to 1970, the Chinese tested the IRBM (CSS-2) to a range of 1,400 nautical miles. Also during this period, the Chinese modified Launch Complex B1 and started construction on B2 at Shuangchengtzu, constructed the Wuchai IRBM Test Complex, and began construction of the Chingyu SSM Test Complex.

A few firings of the MRBM from October 1966 through mid-1968 were probably associated with missile modifications. It appears that the Chinese had no intentions at that time of deploying the CSS-1, although it was within their capability, and were beginning to concentrate their resources on developing an IRBM. Early firings of the CSS-2 were from Shuangchengtzu during 1967 and then moved to Wuchai for longer-range testing. During this period, there was no evidence of MRBM crew training or firings. However, deteriorating border relations with the Soviets in 1968 may have caused the Chinese to rethink their missile strategy for deploying the MRBM. ln August 1968, the lull was broken with the appearance of possible CSS-1 troop training exercises at the Shuangchengtzu Launch Complex A. On several occasions during the remainder of the TCS-654775-72 year, support equipment was visible at the launch complex.

Since observing this activity from August 1968 to date, there have been 14 confirmed crew training firings of this CSS-1; several more firings could have occurred but were undetected.

Additional evidence concerning the existence of fullscale CSS-1 troop-training program began to accumulate. New construction at the Wuwei Training Facility began in 1967 and continued through at least the end of 1969, but at a slow pace. In mid-August 1970, a fairly high level of activity at the facility and a substantial amount of missile equipment was observed. In September 1970, a training site was established 20 nautical miles south of Wuwei near Shuangta. Although we may have detected two-MRBM sites near Kunming, we believe that the Chinese could have deployed 15 or more missiles to other undetected areas, possibly confronting the Soviet Union.

3.00

Other missile systems that may have been influenced by the border incidents are the IRBM fired from Wuchai and the "Chingyu" missile from Chingyu. At least 14 to 16 IRBMs (CSS-2) were tested with at least two in 1971 believed to have been associated with training. The sighting of CSS-2 missiles and equipment in November 1970 at Wuwei suggested that the system was near IOC and that an early troop-training cycle could be expected. Two SSM facilities were recently identified near Liuchingchou which could support operational IRBMs. The CSS-2 has many advantages over the CSS-1 and it is likely to be deployed in much greater numbers with deployment starting in 1972. The CSS-2 could reach Soviet Cities along the trans-Siberian Railroad from Vladivostok westward to Sverdlovsk, from reasonable distances behind China's

A third system is the missile fired from Chingyu to an impact area 2,050 nautical miles away. The Chinese realize that, to threaten Moscow and western USSR, a longer-range missile than the IRBM is required. From CSS-2 technology, the Chingyu missile is believed to be a two-stage variant of the IRBM with a longer-range capability providing the Chinese with an improved strategic posture. This system with a range greater than 3,000 nautical miles would reach targets in Eastern Russia and give the Chinese a considerable degree of latitude in choosing deployment areas. The IOC for this system is not expected until 1974 or 1975.

The only missile that could be a direct threat against the US is a 6,000 nautical mile range ICBM. The Chinese flight tested a vehicle having ICBM characteristics to a reduced range in September 1971. The earliest possible IOC for an ICBM based on this vehicle would be 1975, but more likely

Disarmament

a year later.

border.

China has announced on numerous occasions since 1960 its position on international agreements limiting nuclear testing, nuclear proliferation, and nuclear disarmament. Since the Chinese National Peoples Congress resolution of TCS-654775-72

II-A-12

21 January 1960, in which China disavowed any disarmament agreement to which it had not been a negotiating party, through the present, the Chinese position has shown little evidence of flexibility. In essence that position has been summarized in the following statements:

> "China develops nuclear weapons because she is compelled to do so under imperialist nuclear threats, and she does so entirely for the purpose of defense and for breaking the imperialist nuclear monopoly and finally eliminating nuclear weapons. China's nuclear weapons are still in the experimental stage, and at present she is not yet a a nuclear power, nor will she ever be a 'nuclear superpower' practicing the policies of nuclear monopoly, nuclear threats and nuclear balckmail..."

> > Statement of the Government of the People's Republic of China on July 30, 1971, New China News Agency report, Aug. 7, 1971.

"The Chinese Government's stand on the question of nuclear weapons has always been clear. Firstly, the Chinese Government has consistently stood for the complete prohibition and thorough destruction of nuclear weapons; secondly. the Chinese Government has declared on many occasions that at no time and in no circumstances will China be the first to use nuclear weapons; thirdly, the Chinese Government has consistently stood for the convening of a summit conference of all countries of the world to discuss the question of the complete prohibition and thorough destruction of nuclear weapons and, as the first step, to reach an agreement on the nonuse of nuclear weapons ...

The Chinese Government holds that in order to realize the complete prohibition and thorough destruction of nuclear weapons, the United States and the Soviet Union, which possess large quantities of nuclear weapons, should issue statements separately or jointly, to openly ICS-650775-72

11-A-13



undertake the obligation not to be the first to use nuclear weapons at any time or in any circumstances, and to dismantle all nuclear bases set up on the territories of other countries and withdraw to their own countries the nuclear weapons stockpiled and nuclear armed forces stationed on those territories. Whether this is carried out or not will be a test as to whether they have the desire to realize nuclear disarmament."

Statement of the Government
of the People's Republic
of China on July 30, 1971,
New China News Agency
report, Aug 7, 1971. (U)

During 1971, some evidence of a highly sensitive nature indicated Chinese interest in participating in multilateral arms negotiations through the Geneva-based Conference of the Committee on Disarmament (CCD) and possible future association with some previous arms control agreements. It was indicated that Chinese membership in CCD could possibly follow expansion of the Conference membership to include a number of nations sympathetic to China, revision of basic Conference working guidelines, and adoption of organizational changes designed to limit US and USSR influence. To date, however, the Chinese have made no open moves toward participating in any arms limitation negotiations.

TCS-654775-72

3698

1.00	TAD			
	AB	LE	S	

۰.

.

:.

PEOPLES REPUBLIC OF CHINA

GROUND FORCE DISPOSITION (selected years)

<u>N</u>	19:	54	1960		1963	1964	8	1966	19	69	1	970	1971
Northeast China		4	8		, 8	8		8		6		6	6
North China		4	6	i	6	6		6		6		7	8
East China		8 .	10		• 10	10	3	10		10		. 8	9
Central/South China	1	5	· 6		7	7		7		7		6	7
Northwest China		2	1.		0	0		0		1		1	2
Southwest China,	:	3	4		3	, 3		3	89 (2	4		3	4
Unlocated/(Korea)	. (11)	1		· 0	. 0		0		0		3	0
TOTALS	1	37	36'		34	34		34	2	34		34	36

.

.

.....

TUS-354775-72 -

84 - 96 1



÷

.

1

......

1

.

33

PEOPLES REPUBLIC OF CHINA

NAVAL FORCE (selected years)

TYPE	1949	1950	1954	1958	1960	1963	1964	1966	1969	1970	1971	1972
PRINCIPAL	SUR-				4		Ð					
FACE COMB	ATANTS						*			1		4
DDGS	-	÷	-	5	Ξ.	~ .		.			4	4
DD	-	-	-	-	4	. 4	4	: 4	4	3	1	1
DEGS	_		-	-	• •	-	-		-	-		
DĘ	-	-		, 4 . ,	4•	4	4	÷.•	9	9	y	8
SUBMARINE	\$					N		A	33. 2010 - 2010 - 2010		32633	212
SSB	ĭ _	2		÷	-	÷	-]*	1*	·]*	1*	1*
SS	-	-	1 ·	18	· 25	28	. 28	33	33	37	46	46
	ATC.								12			
PAIRUL BU	615 12	12	20	21	15	15	· 13	16	15	15	15	15
. PC	16	12		27	24	25	24	26	· 25	28	30	32
DTEC		5	1. T	21			· []	1	9	14	22	35
PIFG			-					i	4	. 4	17	32
			40/50	120	136	150	155	178	.156	156	156	156
PI .	8. 4 .	100	40/50	120	150	100	100	1.10	60	72	111	111
PIN	10	<u></u> ,	- -	16	55	66	. 59	138 -	343	378	. 389	391
PGM	. 10	ാ	0	10	00	00			ž	3	3	3
PGMH	-		80.00	-		100				_	ĩ	ĩ
PALY	35 - 5	8 	2.5	-	3.75		- T.	20	1		14	82
T Non or	anation	3 102 6	02122610	R			82					

「「



TABLE 3

PEOPLES REPUBLIC OF CHINA

AIR FORCE (selected years)

	1952	· 1954	·1958	1960	1963	1969	1970	1972
BOMBERS				. ·				
TU-4 TU-16 IL-28	10 50	10 150	10 450	13 2 · 420	.13 2 315	13 2 265	13 13 265	13 32 350
FIGHTERS	25		2	•	8			
MIG-15* MIG-17* MIG-19 MIG-21 F-9	400	700	1,015	1,850	1,030 1,030 150 11	265 1,790 750 25	1,780 940	170 1,775 1,550 120 80

* MIG-15, MIG-17 totals consolidated for early years.

.

2

 \mathbf{i}

10000000



۰.

.

.*



- 12	· •	•		-	
-1	-	п.		•	- 4
		~	-		

.

		ARMED FORCES ST (selected year	DF CHINA TRENGTH ars)	
YEAR	GROUND FORCES	NAVY	AIR FORCE	MISSILE FORCES
1950	2,160,000	. 9,000	4,500	6.718
1954	2,720,000	34,000	: 60,000	1211
1958	2,570,000	59,000	79,000	2 . 5
1960	2,681,000	70,000	80,000	-
1963	2,632,000	: 82,000	120,000	6 4 0
1964	2,311,000	95,000	. 150,000 .	5.5
1966	2,325,000	134,000	197,000	
1969	2,379,000	151,000	291,000	-
1970	2,700,000	198,000	342,000	5-10,000
1971	2,814,000	214,000	363,000	10-15,000
1972	2,815,000	309,000	396,000	15-20,000



TABLE 5

PEOPLES REPUBLIC OF CHINA NUCLEAR WEAPON SYSTEM

Now

CSS-1 (MRBM) 10-30 launchers, range about 600 nm with 3 Mt warhead

CSS-2 (IRBM) 0-15launchers, range about 1400 nm with 3 Mt warhead

Tu-16 medium bomber's - 32, radius 1650 nm with 6600 Lb. bombs

0-25 tactical bombs for delivery by F-9 or IL-28.

. Future

Limited (USSR) Range ICBM - over-3000 nm with a 3 Mt warhead about 1974

Extended (US) Range ICBM - over 6000 nm with a 3 Mt warhead about 1975

. . .

ı

Nuclear-powered Ballistic Missile Submarines - about 1976

2834



PEOPLES REPUBLIC OF CHINA

MISSILE DEVELOPMENT

.

	CSS-1	CSS-2		CHINGYU	ICBM
First Test	1963	1966	:	1970	Sep 71
Firings to Date	35-40	14-16	愈	2	1
IOC	1970	1971	·.	1974-75	1975-76
Range (nm)	600 ,	1,500 '		. 3,000	6,000
Re-entry Vehicle : Weight (1bs)	4,500 . (3 MT)	4,500 (3 MT)	20	4,500 (3 MT)	' 4,500 (3 МТ)
CEP (nm)	1-2	1-2	51	1-2 `	1-3
Propellant	Cryogenic	Storable	2.82	Storable	Storable
Deployment	Soft	Soft		Harđ	Hard
Configuration	Single Stage	Single Stage		Two Stage	Two Stage
Guidance	Inertial	Inertial		Inertial	Inertial



1

TCS-554775-72

à.