25X1
Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

Page Denied

Next 1 Page(s) In Document Denied

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

25X1

Central Intelligence Agency

Washington, D.C. 20505

DIRECTORATE OF INTELLIGENCE

20 November 1985

25X1

China: Developing an Exocet-Like Missile

Summary

China's first tactical naval weapon heavily influenced by a Western design may be ready for deployment as early as 1987. Under development since 1978, the solid-propellant C-801 antiship missile looks similar to the French Exocet, and we believe it results from close scrutiny of an air-launched Exocet Beijing hopes export sales will offset the cost of equipping its own Navy with the missile. Successful development will demonstrate China's capacity to reverse-engineer some advanced weapons, and deployment of the missile will markedly upgrade China's coastal defenses.

25X1

25X1

25X1

25X1

25X1

This memorandum was prepared by Office of East Asian Analysis, Office of Scientific and Weapons Research, and Information available as of 20 November 1985 was used in its preparation. Comments and queries are welcome and may be directed to the Chief, Defense Issues Branch, China Division, OEA,

25X1 25X1 25X1 25X1

25X1

25X1

EA M 85-10170C

25X1

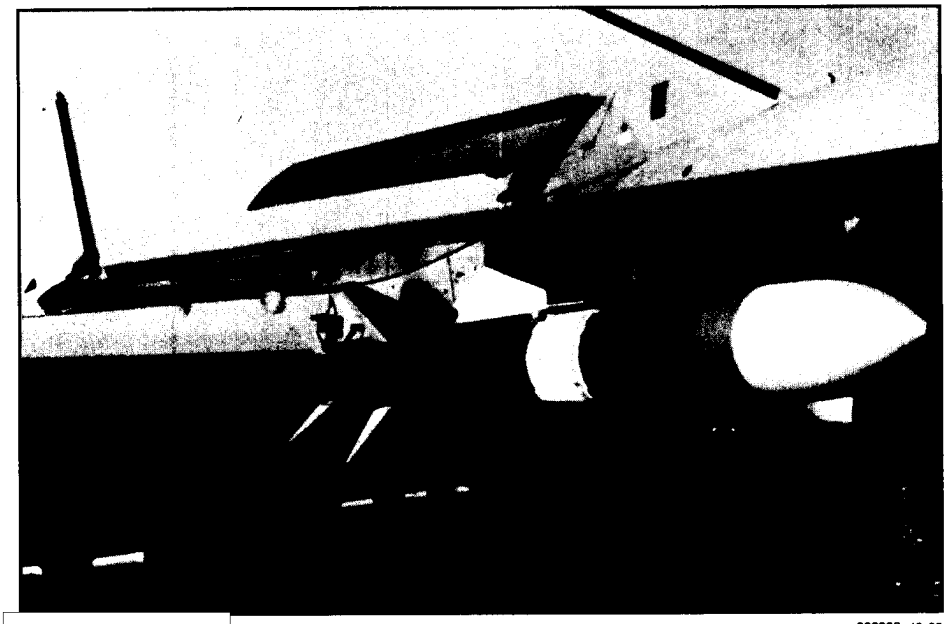
Copy 74 of 90

25X1

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

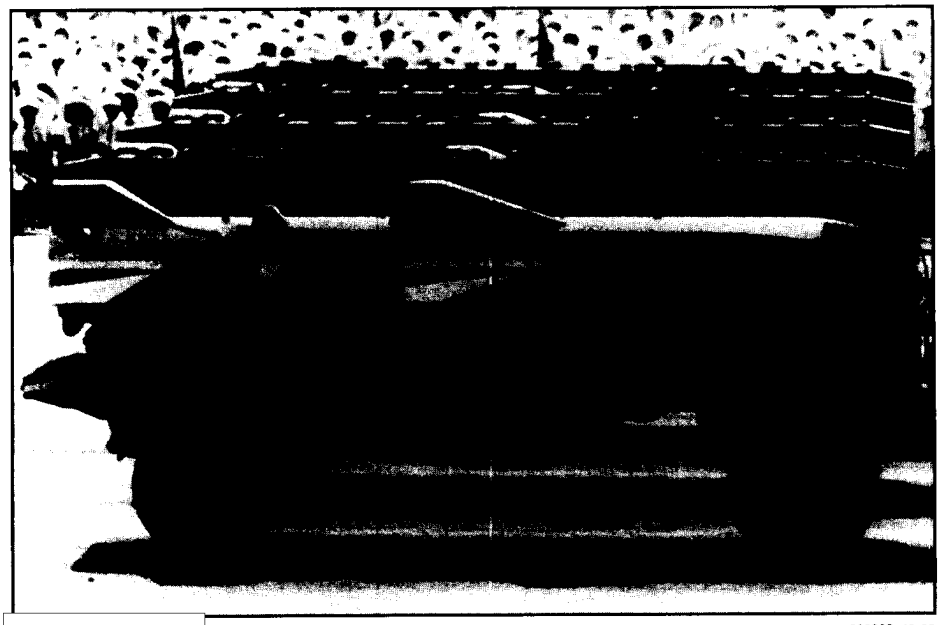
AM-39 Exocet



306906 10-85

25X1

C-801 Antiship Missile



306907 10-85

25X1

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

25X1

25X1

China's First Cruise Missile Submarine

The first evidence of China's plans to build a cruise missile submarine (SSG) was seen on satellite photography in December 1982. An R-class submarine being rebuilt at Wuchang Shipyard in Wuhan was fitted with six cruise missile launchers--three on each side of the sail.

25X1

25X1

25X1

25X1

Technical deficiencies, however, will limit the effectiveness of the submarine. The 1950s-era Soviet equipment on board the SSG makes it more difficult to detect, track, and evade enemy warships than on more modern diesel submarines. In addition, the C-801 missile will not provide Chinese submarines with the large warhead and long-range attack capability to threaten major naval targets--such as an aircraft carrier protected by escorts. To remedy these defects, the Chinese probably plan to develop a longer-ranged version of the C-801 and an encapsulated version suitable for launch from a submerged submarine.

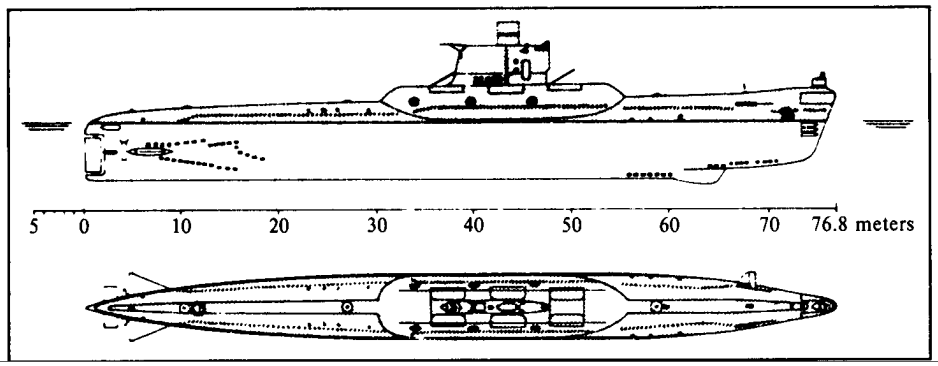
25X1

25X1

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

China's R-Class Cruise Missile Submarine



25X1

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

25X1

Borrowing From a French Design

Unveiled last October during the military parade in Beijing, the C-801 outwardly resembles the French AM-39 Exocet air-launched antiship cruise missile, and we believe it has many of the same characteristics.[1] 25X1

25X1

including Mirage aircraft, Matra air-to-air missiles, and Crotale surface-to-air missiles a copy of the Exocet for exploitation as well. Similarities include the mounting of a relatively small warhead (compared to the Styx-derivative missiles), a similar second-stage propulsion system, and use of a radar altimeter for low-altitude flight. According to weapon characteristics 25X1
the performance of the C-801 is also comparable to that of the AM-39 Exocet. Like the Exocet, the C-801 flies at subsonic speeds and on the final approach skims the ocean's surface to avoid radar detection. The Chinese missile is, however, designed for surface launch and has an added dropoff booster to propel it to cruising altitude. It also has over twice the volume of the Exocet, probably to compensate for China's inability to sufficiently miniaturize missile components and develop more efficient solid-propellant fuels. 25X1

New Dimensions for the Chinese Navy

The C-801 missile will enhance the already substantial capability of the Chinese Navy to accomplish its primary mission--defense of the Chinese mainland against conventional surface attack. China's R-class submarines provide the outer perimeter of China's naval defense zones and are its only credible naval defense against enemy task forces with standoff strike capabilities. With the C-801, the submarine fleet will become even more effective, for it will acquire its own standoff capability, striking surface targets from 50 kilometers away instead of the 4 to 8 kilometers required for a torpedo attack. 25X1

The middle and inner rings of China's defense zones also will be reinforced by the C-801. Beijing is likely to replace many of the outdated liquid-propellant Styx missiles[2] --China's main shipborne surface-to-surface missile--on Chinese destroyers, frigates, and missile patrol boats with the C-801 because of its substantial advantages: 25X1

[2] The Chinese will probably retain the Styx missile--with its longer range and greater destructive power--for land-based coastal defense and possibly as a second missile system aboard larger surface combatants. 25X1

25X1

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

25X1

- The C-801's sea-skimming abilities and its small size make it far more difficult to detect on approach.
- The C-801's solid-propellant fuel is safer, raising the readiness level of ships that heretofore only fueled their missiles just before combat. The C-801 also allows the possible reloading of launchers at sea.
- The C-801's size--roughly half that of the Styx--allows Beijing to double the number of missile launchers aboard each warship.

==========

Table 1
Comparison of C-801 and AM-39 Exocet Characteristics

	C-801	AM-39 Exocet
Range (kilometers)	50	50-75
Speed	Mach 0.9	Mach 0.93
Total Weight (kilograms)	825	655
Volume (cubic meters)	1.0	0.45
Warhead Weight (kilograms)	160	165
Final Approach Altitude (meters)	5	2.2,4.4, 7*

*Depending on sea state

25X1

==========

The Chinese are apparently enthusiastic about their new missile system, for, they are planning to install it on two new frigates currently under construction in Shanghai.

25X1 25X1 25X1

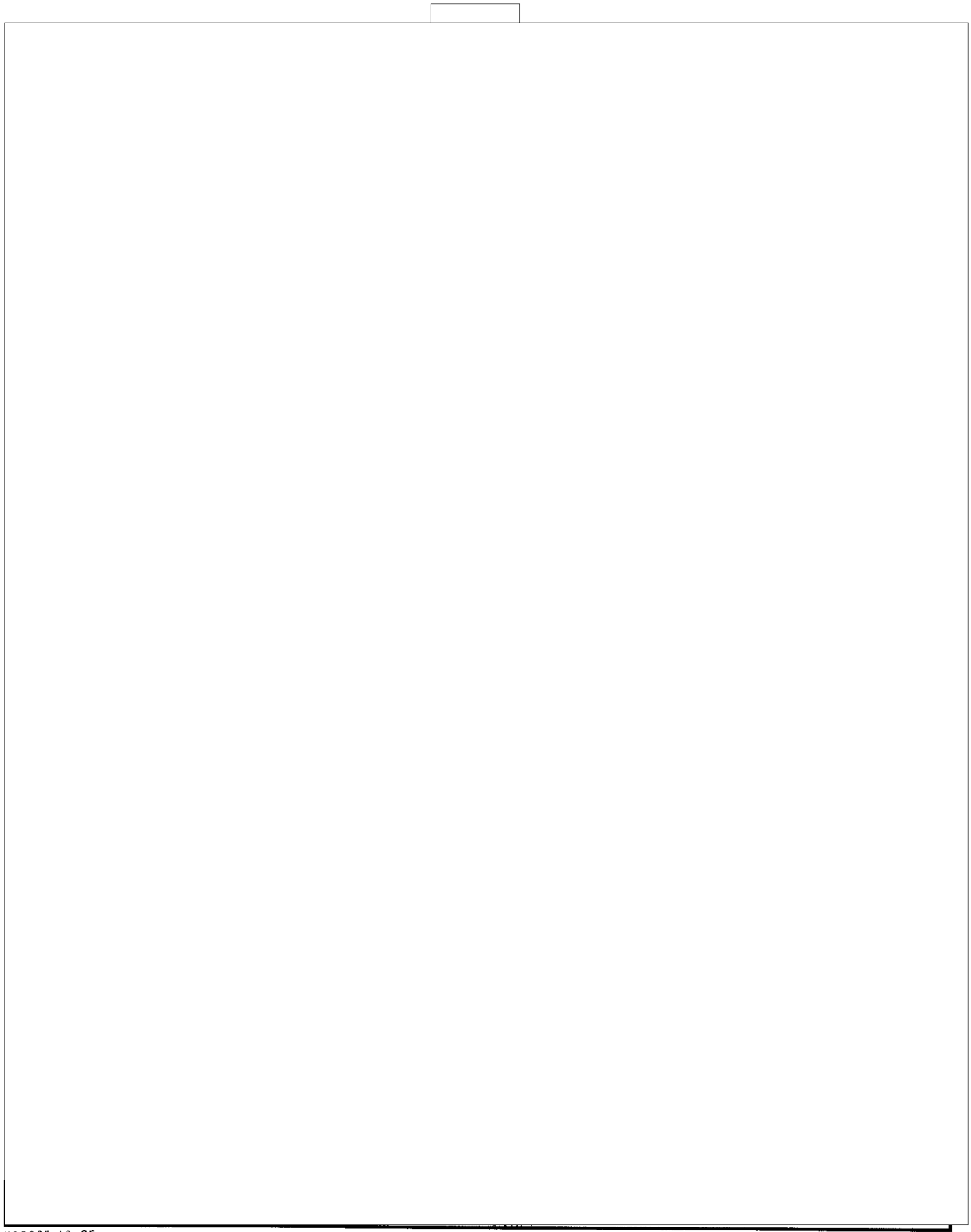
25X1

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

25X1

25X1



25X1

706225 10-85

25X1

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

25X1

25X1

25X1

25X1

A New Arrow in the Arms Export Quiver

Beijing plans to export the C-801, probably to help finance equipping its own Navy with the missile. 25X1 in an initial sales pitch, the Chinese Precision Machinery Import and Export Corporation exhibited scale models of the C-801 at the Paris Air Show in June. 25X1 but probably have not yet signed a contract. 25X1 25X1

This is not the first time Beijing has developed new weapons for its own forces with the export market in mind. Since 1980, China has developed a series of improved tanks and armored fighting vehicles, hundreds of which have been shipped to Iraq, while only a few, as yet, have entered service with China's military. Large overseas sales allow Beijing to lower production costs, invest additional monies in research and development, and, in some cases, test the weapon in combat. Moreover, as Beijing has done with other weapon systems, it probably will be able to produce an Exocet-like missile at one-half to two-thirds the cost of most Western antiship missiles, giving China significant marketing leverage with prospective Third World buyers. 25X1

The apparently successful development of the C-801 also demonstrates the improving capabilities of China's defense industries. Set back by 10 years of internal problems caused by the Cultural Revolution, China's defense sector is only now beginning to unveil the products of revitalization begun by Military Commission Chairman Deng Xiaoping in the late 1970s. The successful reproduction of the Soviet

25X1

25X1

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

25X1

SA-7 surface-to-air missile and the indigenous design of a 152-mm self-propelled howitzer are prime examples of the resurgence of China's defense industries. Weapons development in China will continue to be an extremely slow process, but the development of the C-801 indicates Beijing has the ability and resolve to copy advanced weapon systems based on samples acquired from abroad.

25X1

25X1

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

[redacted] 25X1

SUBJECT: China: Developing an Exocet-Like Missile [redacted] 25X1

DISTRIBUTION:

National Security Council

Copy 1 Gaston Sigur, Senior Staff Member, East Asia, EOB Rm 302.
Copy 2 Don Gregg, Special Assistant to the Vice-President, White House Rm 298.
Copy 3 David Laux, Senior Assistant for China, Taiwan, and Hong Kong EOB Rm 302.

Department of State

Copy 4 Paul Wolfowitz, Assistant Secretary, East Asian and Pacific Affairs, Rm 6205.
Copy 5 AMB Morton Abramowitz, Director INR, Rm 6531.
Copy 6 Herbert Levin, Policy Planning Staff, Rm 7330.
Copy 7 David N. Schwartz, Office of Policy Analysis, Rm 7430.
Copy 8 Donald M. Anderson, Director, EA/CH, Rm 4318.
Copy 9 AMB H. Alan Holmes, Director, Bureau of Political and Military Affairs, Rm 7327.
Copy 10 Richard Devillafranca, Bureau of Political Military Affairs, Room 7430.
Copy 11 Mark Pratt, EA/RA/TC, Room 4312.
Copy 12 Mark A Sigler, INR/PMA, Room 6524A.
Copy 13 Jack Sontag, INR/EAP/CH, Room 8840.

Department of Defense

Copy 14 Richard L. Armitage, Assistant Secretary of Defense, ISA, Rm 4E808, Pentagon.
Copy 15 Richard Perle, Assistant Secretary of Defense for International Security Policy, Rm 4E838, Pentagon.
Copy 16 James Kelly, Deputy Assistant Secretary for East Asia, ISA, Rm 4E817, Pentagon.
Copy 17 Major General Perroots, Air Force Assistant Chief of Staff for Intelligence, Rm 4A932, Pentagon.
Copy 18 Rear Admiral William O. Studeman, Director of Naval Intelligence, Rm. 5C572, Pentagon.
Copy 19 Lieutenant General Sidney T. Leinstein, Army Assistant Chief of Staff for Intelligence, Rm 2E466, Pentagon.
Copy 20 Lieutenant Colonel Eden Y. Woon, Office of Joint Chief Staff, China Plans and Policy, FESA J-5, Rm 2E973, Pentagon.
Copy 21 Lieutenant Colonel Gary Weis, ISA, Rm 4C849, Pentagon
Copy 22 John J Sloan, Defense Intelligence Officer, East Asia and Pacific, Rm 2C238 Pentagon.
Copy 23 Frank Jiordano, JSI-3A, Rm 1C945, Pentagon.

[redacted] 25X1

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

25X1

Copy 24 DIA/DB-2B2, Rm C2-814, DIAC. 25X1
Copy 25 DIA/DE-2, Rm B6-832, DIAC.
Copy 26 DIA/AT-3/China, Rm 1120, Pompano Plaza West.
Copy 27 Chief, NSA/B-Group, Rm 3W106, Fort Meade.
Copy 28 Chief, NSA/B72, Rm 2S040, Ft. Meade.
Copy 29 Chief NSA/B721, Rm 2S040, Ft. Meade.
Copy 30 Hal Leach, NISC-OOW, Rm 2006, Suitland.
Copy 31 Karen Steelberg, Chief, NOIC/O4, Rm 1650, Suitland.

Department of Energy

Copy 32 Douglas Faulkner, DOE/DP-421, GA-257, Forrestal Bldg.

25X1

National Photographic Interpretation Center

Copy 33 Chief, NPIC/IEG/EAD, 25X1
Copy 34 Chief, NPIC/IEG/EAD 25X1

Central Intelligence Agency

Copy 35 DDI (7E44)
Copy 36 C/ACIS (6F20)
Copy 37 NIO/EA (7E62)
Copy 38 NIO/USSR-EE (7E62) 25X1
Copy 39
Copy 40 C/EA/RR (5D10)
Copy 41 C/DDO/EA (5D38)
Copy 42 DDO/EA (5D54) 25X1
Copy 43 C/PES (7F24)
Copy 44 NIC/Analytical Group (7E47)
Copy 45 PDB Staff (7F30)
Copy 46 CPAS/ILS (7G50)
Copy 47-49 CPAS/IMC/CB (7G07)
Copy 50-51 OCR/ISG (1H19)
Copy 52 C/OCR/DSG/EA (1H18)
Copy 53 D/SOVA
Copy 54 C/SOVA/TWAD/A (4E12)
Copy 55 C/SOVA/TWAD/T (4E28)
Copy 56 D/OSWR (5F46) 25X1
Copy 57-66 OSWR/NSD (5G00)
Copy 67 25X1
Copy 68-
Copy 73 D/OEA (4F18)
Copy 74 C/OEA/PROD (4G48)
Copy 75 C/OEA/NEA (4G43)
Copy 76 C/OEA/SEA (4F38)
Copy 77 C/OEA/CH (4G32)
Copy 78 C/OEA/CH/DOM (4G32)
Copy 79 C/OEA/CH/FOR (4G32)

25X1

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5

[redacted] 25X1

Copy 80 C/OEA/CH/DEV (4G32)
Copy 81-90 C/OEA/CH/DEF (4G32)

25X1

Sanitized Copy Approved for Release 2010/08/23 : CIA-RDP04T00447R000302130001-5