

MAPPING, CHARTING, AND GEODESY SHORTFALLS

CRITERIA FOR LEVELS OF DIFFICULTY

	LEVELS OF DIFFICULTY					
	A	B	C	D	E	F
MC&G Coverage	1:50 New	1:50 Old	Some 1:50	MSI Avail	1:250 New	None

F - Countries with no coverage by 1:50,000 or 1:250,000 scale maps or Multispectral Imagery (MSI)

E - Countries with complete coverage by 1:250,000 scale maps (either series 1501 (ground) or 1501A (air)) and map editions all have been produced since 1980. No 1:50,000 scale map coverage or MSI are available.

D - Countries which have current and complete MSI available, but no 1:50,000 scale map coverage

C - Countries with partial coverage by either current or dated 1:50,000 scale maps

B - Countries with complete coverage by 1:50,000 scale maps, most editions of which were produced prior to 1980

A - Countries with complete coverage by 1:50,000 scale maps and all map editions were produced since 1980

Using the above criteria, expeditionary environment countries were classified into the six categories (A through F) through research of the data sources. These sources consisted of the following.

- (1) Department of Defense, Defense Mapping Agency, Catalog of Maps, Charts, and Related Products.
- (2) Telephone conversations with the Earth Observation Satellite Company, Subject: MSI Support for DMA.
- (3) Commanding General, Marine Corps Combat Development Command letter 3140 IN 06 dated June 1, 1989, Subject: Marine Corps Concerns--Mapping, Charting, and Geodesy Documents.

SUMMARY ASSESSMENT OF IMPACT ON EXPEDITIONARY ENVIRONMENT COUNTRIES

The accompanying charts show the distribution of Mapping, Charting, and Geodesy (MC&G) coverage by region. Because there was no countries identified with items E (1:250 New) and F (None) at the upper end of the level of difficulty scale, these items were not addressed further in this assessment.

In the Western Hemisphere, only four countries had full coverage by the older 1:50,000 scale maps. These were Cuba, Dominican Republic, Haiti and Jamaica. Over 50 percent of the countries had partial coverage with 1:50,000 maps while Grenada, Mexico, and Surinam had the less effective MSI available.

DISTRIBUTION OF COUNTRIES BY MC&G COVERAGE

	1:50 NEW	1:50 OLD	SOME 1:50	MSI AVAIL
WESTERN HEMISPHERE		CUBA DOM. REP. HAITI JAMAICA	COLOMBIA COSTA RICA EL SALVADOR GUATEMALA HONDURAS NICARAGUA PANAMA PERU VENEZUELA	GRENADA MEXICO SURINAM

In the Middle East/Southwest Asia most of the countries had some 1:50,000 scale map coverage. Only Bahrain had full coverage with dated 1:50,000 maps, and Kuwait and North Yemen had just the MSI available.

In Africa, there were no countries with full 1:50,000 scale map coverage. Countries in this region were about equally divided between those with partial coverage by 1:50,000 scale maps and those with MSI. Countries such as Algeria, Liberia, South Africa, and Zimbabwe had partial 1:50,000 map coverage. Representative countries with only MSI were Angola, Namibia, Sudan, and Uganda.

In the Asia/Pacific region there were only two countries, North Korea and South Korea, with full coverage by dated 1:50,000 scale maps. The remaining countries were equally divided between the partial 1:50 and the MSI available categories. Nations such as Afghanistan, Pakistan, and Thailand had the partial 1:50 while Burma, India, and Malaysia were representative of the MSI available category.

In Europe and the Mediterranean, the countries of Greece and Turkey presented the most difficult conditions with only MSI available. Italy has partial 1:50 coverage while Denmark, Norway and Yugoslavia had full coverage with the dated 1:50's.

DISTRIBUTION OF COUNTRIES BY MC&G COVERAGE

	1:50 NEW	1:50 OLD	SOME 1:50	MSI AVAIL
MIDDLE EAST/ SOUTHWEST ASIA		BAHRAIN	EGYPT IRAN IRAQ LEBANON LIBYA OMAN QATAR SAUDI ARABIA SOUTH YEMEN SYRIA UAE	KUWAIT NORTH YEMEN
AFRICA			ALGERIA DJIBOUTI ETHIOPIA LIBERIA SOUTH AFRICA TUNISIA ZAIRE ZIMBABWE	ANGOLA KENYA MADAGASCAR NAMIBIA SOMALIA SUDAN UGANDA
ASIA/PACIFIC		NORTH KOREA SOUTH KOREA	AFGHANISTAN INDONESIA JAPAN PAKISTAN PHILIPPINES PRC THAILAND VIETNAM	BANGLADESH BURMA INDIA MALAYSIA PAPUA N. G. S. PACIFIC IS. SPRATLY IS. SRI LANKA
EUROPE/MED		DENMARK NORWAY YUGOSLAVIA	ITALY	GREECE TURKEY

PLANNING AND PROGRAMMING IMPLICATIONS

This assessment has indicated that there are significant shortfalls in MC&G coverage of expeditionary environment countries. Over 85 percent of the countries have only partial 1:50,000 scale map coverage or MSI. As a result of this situation, MAGTF's employed in many of these countries will not have the maps required to conduct effective ground and air operations. To overcome this deficiency, actions must be taken to ensure that the Defense Mapping Agency directs its available resources toward an aggressive large-scale mapping program of Third World countries to support the range of operations across the spectrum of conflict.

Mission Area Factors - 40