

ARSAD PROGRAM

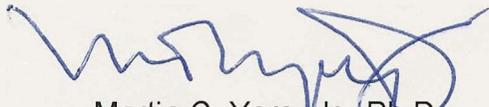
A Partnership in Science and Technology between the United States and the Kingdom of Saudi Arabia in Meteorology and Environmental Science

CY 2002

MANAGEMENT AND FINANCIAL PLAN

The signatories below hereby submit for review and approval the attached Management and Financial Plan (MFP) for the ARSAD Program.

Reviewed by:



Martin C. Yerg, Jr., Ph.D
Director, International Activities
Office, NOAA
United States of America

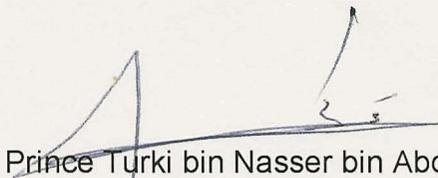
Date: 9 Feb 2002



Sameer A. Bukhari, Ph.D
General Director of Administration
PME
Kingdom of Saudi Arabia

Date: 9 Feb 2002

Approved by:



Prince Turki bin Nasser bin Abdulaziz
President, Presidency of Meteorology
and Environmental Protection (PME)
Kingdom of Saudi Arabia

Date:

EXECUTIVE SUMMARY

Arsad Program Purpose: Assist the Presidency of Meteorology and Environmental Protection (PME), formally called MEPA (Meteorology and Environmental Protection Administration), to raise the level of its expertise and become a regional leader in meteorology

- Program is in the 3rd year of a 5-year program to increase forecasting skills in the Kingdom, based on the National Weather Service's high-resolution ETA computer model
- PME employees are being trained in the use of the latest forecasting techniques and in computer modeling at NOAA's National Centers for Environmental Prediction Saudi Training Desk in Camp Springs, Md.
- Consultants, NOAA and EPA staffs work side-by-side with PME to ensure the successful transfer of the latest technology in weather forecasting and approaches to environmental issues.
- Results include better observational coverage especially in the area of the Two Holy Mosques, faster and more reliable national and international telecommunications, wider international and regional interactions, and increased concern for the needs of users.
- The Arsad Program is working to prepare the Kingdom for expected rapid industrial development and population growth, which will intensify demands on the environment and on pollution control systems.
- Environmental Protection Directorate General training has started already in 1999, with additional training planned for the next five years along with assisting to establish environmental protection regulations and procedures.
- Success with the Saudi Training Desk has shown that short-term improvements are possible, providing direct benefit to the Kingdom, such as the recently recognized improved forecasting skills during the Haj 2001.

Proposed Projects in CY 2002

- Continue training individual PME forecasters at the Saudi Desk in NOAA
- Help plan the procurement of the computer system to successfully transfer the high-resolution model to the Kingdom
- Integrate the PME workstation to the LAN to facilitate running the forecasting model to meet particular needs such as local area or outside the Kingdom weather forecasts.
- Collaborate on procedures to handle hazardous waste, coastal zone management, air and water quality standards, solid waste procedures, and issues of dredging and landfill.
- Coordinate with the international meteorological community to develop an operational dust storm model
- Determine a suitable marine buoy system for the Red Sea
- Establish Internet linkages for transmitting data for the high-resolution model between USA and KSA
- Work with Saudi Arabian Airlines to increase the amount of data from aircraft (AMDAR Project)
- Obtain new software (ArcView) and training to improve the Kingdom's Geographic Information Systems (GIS)

FY 2002 (1 January 2002– 31 December 2002) Financial Plan*

Arsad Program Finance (US dollars)

Projects	FY 2001	FY 2002
Saudi Arabian Training Desk	352,000	354,000
Telecommunications – Jeddah and Washington	317,400	356,000
U.S. Environmental Protection Agency (EPA)	88,000	80,000
Computer, Forecasting, and Environmental Consultants	135,000	114,600
Domestic and International Travel	109,267	102,067
Systems Development and Software Upgrades	65,000	60,000
TOTALS	1,066,667	1,066,667

***Salaries of U.S. Government employees are covered by the respective agencies, approximately \$200,000 per year**