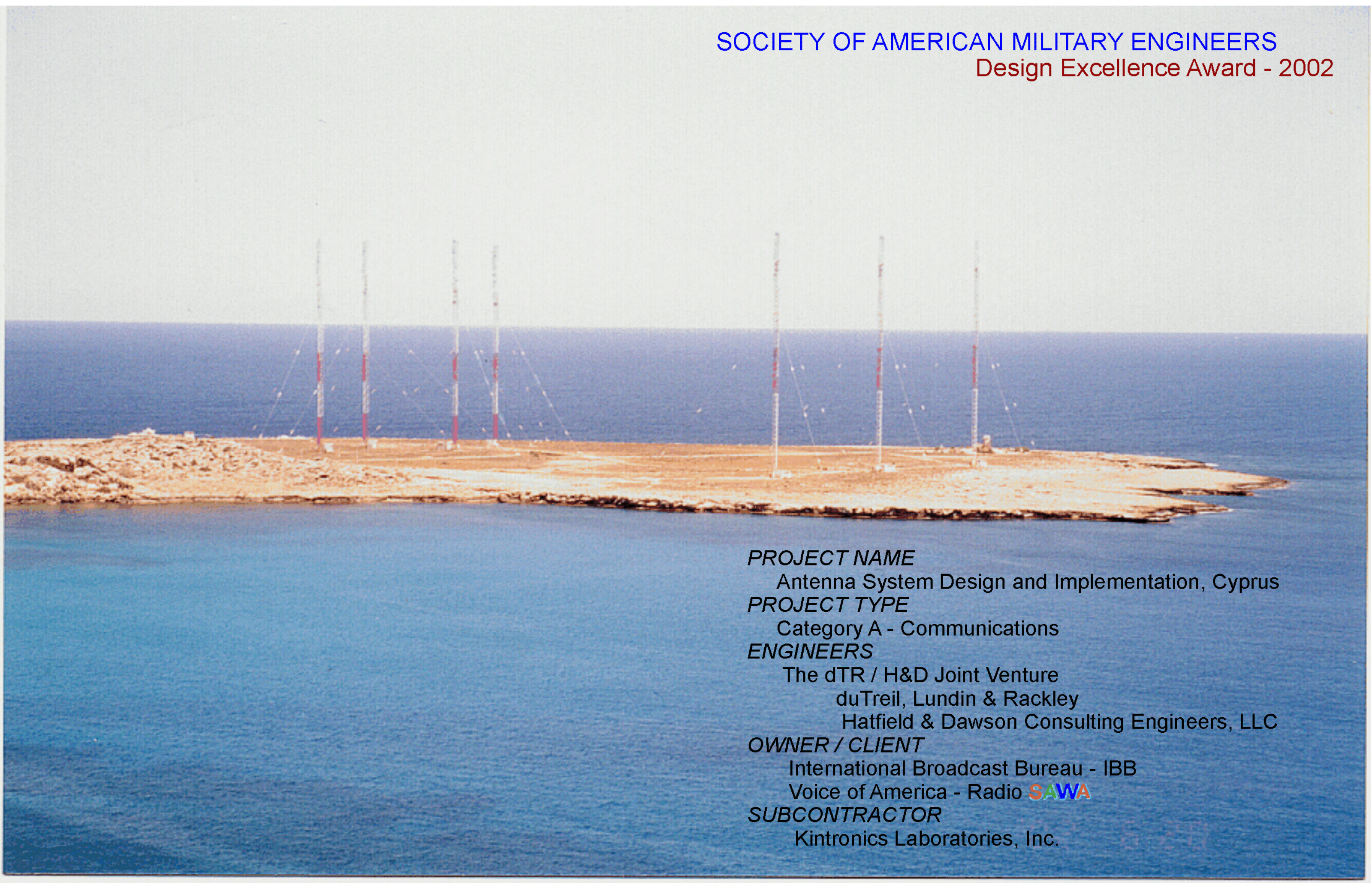


SOCIETY OF AMERICAN MILITARY ENGINEERS  
Design Excellence Award - 2002



*PROJECT NAME*

Antenna System Design and Implementation, Cyprus

*PROJECT TYPE*

Category A - Communications

*ENGINEERS*

The dTR / H&D Joint Venture

duTreil, Lundin & Rackley

Hatfield & Dawson Consulting Engineers, LLC

*OWNER / CLIENT*

International Broadcast Bureau - IBB

Voice of America - Radio **SAWA**

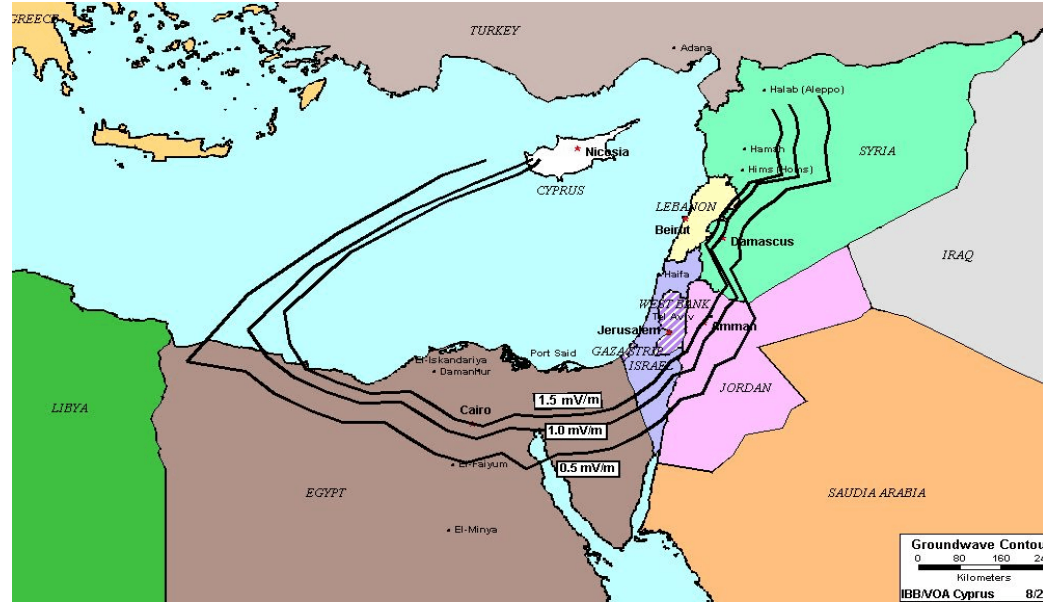
*SUBCONTRACTOR*

Kintronics Laboratories, Inc.

**MEETING THE CHALLENGES OF AN ACCELERATED DEADLINE TO IMPROVE U.S. GOVERNMENT BROADCASTING CAPABILITIES TO THE ARAB-SPEAKING WORLD BY THE FIRST ANNIVERSARY OF THE SEPTEMBER 11<sup>TH</sup> ATTACK ON THE UNITED STATES**

As the first phase in the improvement of U.S. government broadcasting capabilities to the Arabic speaking world, particularly Egypt, the International Broadcast Bureau sought to establish a new high power medium wave transmitting facility on the eastern Mediterranean Island of Cyprus.

The Project began with preliminary coverage analysis in June of 2001. The project was completed and placed into regular service on August 17, 2002. The facility provides the U.S. government Arabic language broadcast service, Radio **SAWA**, with widespread Middle East coverage from Syria south through Lebanon, Israel/Palestine, the Nile Delta and west to Alexandria.



*“The IBB had a mission to get an MW broadcast facility operating from Cyprus as quickly as possible. After the unsuccessful attempts at obtaining a clear site for construction from ‘scratch’, the IBB was left with only viable alternate of installing a system collocated with Radio France.*

*Because of the political requirements of dealing with Cyprus government officials and need to get on air ASAP, it was decided that the IBB itself should be the ‘general contractor’ using three main sub-contractors: THALES (transmitter), JA PARIS SA (structural rehabilitation) and the dTR / H&D JOINT VENTURE (antenna design and implementation).*

*“This process offered the flexibility needed and resulted in the desired high quality of performance along with lower project cost. The IBB assumed the integration risks but was confident because of all the known circumstances that these would be small. Indeed, all this proved out - the work was performed to the great satisfaction of all affected (IBB / Cyprus / Radio France RFI) and completed ahead of projected schedules.’*

Vince Nowicki, Chief Broadcast Technical Division, IBB



**PROJECT TEAM**

**OWNER**

INTERNATIONAL BROADCAST BUREAU (IBB)  
VOICE OF AMERICA - RADIO **SAWA**

**ENGINEERING - SITE SELECTION - ANTENNA DESIGN and IMPLEMENTATION**

dTR / HATFIELD & DAWSON JOINT VENTURE

**EQUIPMENT SUPPLIER**

KINTRONICS LABORATORIES

**SITE OWNER**

RADIO FRANCE

**LOCAL CONTRACTOR**

FRIXOS & CO., CYPRUS

**TRANSMITTER**

THALES, FRANCE

**STRUCTURAL REHABILITATION**

JA PARIS SA, FRANCE

**COORDINATION**

GOVERNMENTS OF CYPRUS AND GREAT BRITAIN

**FACTS**

The seven Cape Greco towers are 430 feet (130 meters) tall.

The site is part of the Ayia Napa Forest National Park and consists of the 150 acre Cape Greco peninsula.

The combined facility is the world’s highest power multiple frequency, low or medium frequency site not specifically designed for that use.

Radio France operates with 1.2 megawatts; VOA/Radio **SAWA** with 600 kilowatts - a total power of nearly 2 million watts.

The VOA/Radio **SAWA** transmitting facility provides US government Arabic language programming service to at least six major cities of over a million inhabitants. Total population served is over 50 million.

The Lighthouse at Cape Greco has been the site of a navigation marker for 2000 years.

