

REPRESENTATIVE EXPERIENCE SUMMARY



CUSTOMER	EQUIPMENT	CONTRACT #	\$ VALUE	AWARD DATE	PROJECT DESCRIPTION
REPUBLIC OF IRAQ in conjunction with the US GEOLOGICAL SURVEY Iraqi Ministry of Agriculture	40 Agro-Meteorological Stations SatLink Satellite Transmitter & Logger XLite Datalogger 2 METEOSAT (EUMETSAT) Receive Sites XConnect Software In-Country Training (2 weeks)	G10PD02457, G10PX02862, G10PD02697	\$850,000	awarded 2010	Sutron Corporation assisted the Iraqi Ministry of Water Resources in conjunction with the USGS, in building a country-wide network of Agro-Meteorological Stations with communications via Eumetsat (geostationary satellite). Data will be collected in two locations via the supplied Satellite Receive Sites. Part of this contract included an in-country training for a period of 2 weeks. Stations are equipped to monitor Wind, Air Temperature & Humidity, Air Pressure, Rain, Solar Radiation, Soil Temperature & Moisture parameters.
NOAA/NWS (NATIONAL WEATHER SERVICE) Dave Desrosiers W/OPS11 - Engineering & Acquisition Branch NWS Silver Spring, MD (301) 713-1845 x115	SUTRON FISCHER PORTER PRECIPITATION GAUGE REBUILD KIT The Sutron Fischer Porter Precipitation Gauge Rebuild Kit, that converts old FP gauges into digital recorders, comes complete with a precision load cell for measurements, Sutron data recorder with display, rechargeable battery & solar panel.	DG 133W-08-CN-0198	\$765,600	2008 - 2009	The National Weather Service (NWS) operates & maintains a network of 2,200 rain gauges that record precipitation accumulation, at 15 min. intervals, on a punched paper tape. The rebuild kit provided by Sutron converts the gauge into a digital measuring system that can be installed in the field using simple tools in under 1 hour. The kit includes a data recorder to automatically measure & record precipitation at user -set intervals. A display provides easy viewing of the data & setup. A 2-point calibration routine is built-in for simple field calibration of the gauge. Data can be retrieved via the SD card slot, RS232, or SDI-12. The system easily interfaces to GOES Satellite Transmitters and wireless modems for integration into an automatic data collection system. Additional measurements can be added at the factory
ADASA/DOMINION INSTITUTO NACIONAL DE METEOROLOGÍA E HIDROLOGÍA VENEZUELA (end user) UTE DOMINION-ADASA (purchaser) Josefa Valcárcel, 3-5 28027 Madrid, Spain Tel: +34 (913) 717 300 Attn: Roberto Rossello r.rossello@dominion.es	ADASA HYDRO-MET MONITORING SYSTEM <ul style="list-style-type: none"> ▶ 631 GOES Satellite Stations that monitor rainfall, hydrological, meteorological, & agricultural parameters ▶ 1 Digital Direct Readout Ground Stations ▶ GOES Satellite software ▶ 3 Test Sets 	Contract # DNNE-MED-VEN-02004	\$4,500,000	2009 - 2010	Supply of 631 GOES/GPRS Based Remote Monitoring Stations to be used as the primary source for the Country of Venezuela Forecasting Center. Supply and Install 1 Digital Direct Readout Ground Station and System software (ILEX) as the primary software application to ingest transmitted data. The system software receives, decodes and formats the data in a customized format so it can be ingested in a Data base. Provide in-country Operation and Maintenance training on remote stations and system software.
IRAQI MINISTRY OF WATER RESOURCES (end user) WASHINGTON GROUP INTERNATIONAL (purchaser) 720 Park Blvd., PO Box 73 Boise, ID 83729 Tel: (208) 386-6913 Mike.Bennett@wgint.com	<ul style="list-style-type: none"> ▶ 56 Bubbler Water Level Measuring Stations ▶ 28 Radar Water Level Measuring Stations ▶ 7 Water Velocity Measuring Stations ▶ 50 Water Quality Measuring Stations ▶ 8 Snow Level Monitoring Stations ▶ 7 Current Profiling Instrument ▶ 5 Well Level Measuring Instruments 	W914NS-04-D-0007	\$2,241,308	2007	Sutron supplied over 100 Satellite Measuring Stations, a combination of Water Level & Water Quality Measuring Stations. 58 Sutron Bubbler were supplied, & 94 Sutron METEOSAT Satellite Transmitters. With the USGS, Sutron trained 20 engineers from the Iraqi Ministry of Water Resources, at the USGS's office in Boise Idaho covering installation, operation, troubleshooting & maintenance equipment & the system as a whole. The project was completed & delivered in a timely manner.

REPRESENTATIVE EXPERIENCE SUMMARY



<p>INDIA CENTRAL WATER COMMISSION (CWC) UPPER GODAVARI DIVISION B.V. RAO, EXECUTIVE ENGINEER 115/382/396 III Floor Red Hills Hyderabad, 500004 India 040-23391654 - phone</p>	<p>HYDRO-MET SYSTEM W/ INSAT TRANSMITTERS & RECEIVE SITES</p> <ul style="list-style-type: none"> ▶ 30 Rainfall Only Stations ▶ 127 River Water Level & Rain gauge Stations ▶ 6 Reservoir Water Level & Rain gauge ▶ 5 River Water Level & Rain Gauge & Met sensors: AT/RH, Evaporation, Sunshine Duration & Wind Speed/Direction ▶ 2 DDRGS ▶ XConnect Software 	<p>No. UGD/Telemetry/ FF/7998-8002 UGD/Telemetry/IV (A)/FF/8358-84</p>	<p>@\$4,000,000</p>	<p>2006/ 2007 4 year Maintenance Contract</p>	<p>Supply, Installation, Testing, Commissioning & Maintenance of Real-Time Data Acquisition Network for Collection, Transmission & Processing of Hydro Meteorological Data, Gauging Equipment, Satellite Telemetry & Associated Systems. INSAT Satellite Communications for Stations. VSAT Communications between Existing Digital Direct Readout Ground Station Facilities located at Burla & Jaipur & various locations in Krishna & Godavari Basin, Brahmaputra & Barak Basin Organization, Mahanadi & Eastern Rivers, Lower Ganga Basin & Yamuna Basin.</p>
<p>CANADA HOSKIN SCIENTIFIC Jon Matheson, President 239 East 6th Avenue, Vancouver, BC V5T 1J7 Phone (604) 872-7894 Fax (604) 872-0281 http://www.hoskin.ca/</p>	<p>1173 Data Loggers & GOES Satellite Transmitters (SatLink)</p>	<p>Multiple</p>	<p>\$12,953,185</p>	<p>1989 - 2010</p>	<p>Satellite Water and Weather Monitoring Stations</p>
<p>AFGHANISTAN Eng. Mohammad Farhad (Noorzai) Director, Project Co-ordination Unit (PCU) Emergency Irrigation Rehabilitation Project (EIRP) Ministry of Energy & Water Darul Aman Road Kabul, Afghanistan</p>	<p>174 STREAM GAGING STATION NETWORK 174 Stations - All measure Water Level, Precipitation (Rain Gages that also measure snowfall), Air Temperature, Relative Humidity. Some also measure Water Quality, Conductivity, Turbidity & Temperature.</p>	<p>Supply and Installation of Hydrological Network ICB No, GH-102 IFB No: GH102 Loan/Credit No.CR-3845-AF</p>	<p>@\$5,992,384 Supply & Installation 3 year O&M Contract: \$1,749,150</p>	<p>2007 - 2009 with 3 year O&M support</p>	<p>STATION DISTINCTIONS 163 Stations - Bubbler Gages for measuring water levels 11 Stations - Radar Level Sensors for high sediment, wide rivers w/ unstable banks & available suitable bridge (mount radar) 20 Stations - Water Quality measurement (conductivity, temperature, turbidity)</p>
<p>VIETNAM Southern Airport Authority of the Republic of Vietnam</p>	<p>AIRPORT WEATHER OBSERVATION SYSTEM SAWS3 Airport Weather Systems including cloud height and RVR/Visibility for 2 runways</p>			<p>2007</p>	<p>State-of-the-art, turn-key Airport Weather System to at 7 airports as per new ICAO and WMO recommendations. System uses fiber optic and wireless communications. Operation is for CAT3.</p>
<p>NIGER RIVER BASIN AUTHORITY & THE UNITED NATIONS OFFICE FOR PROJECT SERVICES MR. MAMADOU SOUMAH Expert en Telecommunication et Main CENTER INTER – ETATS DE PREVISIONS HYDROLIQUE Secretariat, B. P. 729 NIAMEY Republique du Niger Tel: (00227)73 32 39</p>	<p>WMO-HYCOS COMPLIANT WEATHER STATIONS</p> <ul style="list-style-type: none"> ▶WMO HYCOS standard ▶25 DCPs including AccuBubblers, Rainfall Tipping Buckets, SatLink Logger/Transmitter 		<p>\$285,000</p>	<p>January, 2005 Completed May, 2005</p>	<p>State-of-the-art METEOSAT Satellite Telemetry-Based Data Collection System In order to preserve continual operation of the HYDRONIGER Data Collection Network, the Niger River Basin Authority (ABN) wished to modernize its real-time data collection capabilities by installing 25 Data Collection Platforms (DCPs) and changing its telemetry system from ARGOS to METEOSTAT. DCPs supplied were in compliance with HYCOS standards including one water level detector & one rainfall detector.</p>

REPRESENTATIVE EXPERIENCE SUMMARY



<p>KENYA METEOROLOGICAL DEPARTMENT DR. JOSEPH MUKABANA DIRECTOR Suresh Patel Kenya Auto Electrical Muthithi Road, Parklands P.O. Box 46631 - 00100 Nairobi, KENYA E-mail: kae@alandick.co.ke</p>	<p>KENYA SYNOP AWS</p> <ul style="list-style-type: none"> ▶ 12 RTUs ▶ 11 Local Base Stations ▶ 1 Central Base Station <p>SENSORS: Air Temperature, Relative Humidity, Rainfall, Barometric Pressure, Wind Speed, Wind Direction and Solar Radiation</p> <p>TELEMETRY: Maxstream 2.4 GHz radios to communicate with the local PCs. GSM modems to transfer the data to the Central Station over the local cellular network.</p>		\$230,000	2007 with on-going support	<p>PARAMETERS:</p> <ul style="list-style-type: none"> Rain (Accumulated Rain) Barometric Pressure (QNH, QFE, Tendency) Solar Radiation (W/m², Hours of Sun) Wind Speed (Gust, Instantaneous, Average) Wind Direction (Instantaneous, 2minute Average, 10 minute Average) Air Temperature (Ambient Temperature, Maximum, Minimum, Temp. of Evap.) Relative Humidity (Humidity, Dew Point)
<p>COLOMBIA DGCA Direcci on Genera l de Aviaci viaci on Civi l c/o APCYTEL, Ltda., Carrera 29A No. 70A-87, Santafe de Bogota, D.C., A.A., 090526, Pedro Sarmiento, Tel: 57-1-311-78-64, Email: apcytel@elsitio.net.co</p>	<p>AIRPORT WEATHER OBSERVATION SYSTEM SAWS3 Airport Weather Systems including cloud height and RVR/Visibility for all domestic and international airports</p>			Awarded 2005 Completed 2006	<p>State-of-the-art, turn-key Airpoto Weather System to provide information at 7 Airports as per new ICAO and WMO recommendations.</p> <p>The system provides voice transmission,</p>
<p>POLAND WORLD BANK'S EMERGENCY FLOOD RECOVERY PROJECT Tomasz Buczek, Technical Director TSH POLSKA sp.j Makowskiego Street 20/96 31-325 Krakow tel: +48 12 378 37 55 fax: +48 12 378 37 56 email: tomasz.buczek@tsh.com.pl web:http://www.tsh.com.pl</p>	<p>FLOOD WARNING SYSTEM FOR POLAND</p> <ul style="list-style-type: none"> ▶ 1033 Dataloggers (analog & digital) ▶ 107 SDI-12 Shaft Encoders ▶ 345 Bubble Gauges ▶ 57 Radar Water Level Sensors 	Ref: World Bank Project Component B2.1.3	\$2,461,551	January 2004	<p>Poland's Hydrological and Meteorological Telemetric Measurement Network, under direction of Poland's Institute of Meteorology & Water Management, the Emergency Flood Recovery Project will restore basic infrastructure damaged by severe flooding in recent years</p>
<p>NOAA NATIONAL OCEAN SERVICE 1305 East West Highway Silver Spring, MD 20910 Mr. Thomas Mero (301) 713-2864</p>	<p>TIDE STATIONS FOR NOAA 250 - DCPs/Tide Gauges Procurements for Sutron's state-of-the-art Tide Stations, the only NOS-approved detection & warning equipment designed specifically to meet NOS requirements for monitoring tides, storm surge, sea levels, tsunamis, & a number of other coastal parameters. Main Stations, Redundant Stations, Barometric Pressure Sensors, Redundant Gages, Hydrographic Gages, Sensors, Spares, & Peripherals.</p>	Multiple Contracts	\$9,589,820	1989-2009	<p>Water level measurement systems monitoring the entire United States coast line and other worldwide tidal monitoring sites.</p>
<p>NOAA NOS 1305 East West Highway Silver Spring, MD 20910 Mr. Thomas Mero (301) 713-2864</p>	<p>NOS-APPROVED TIDE STATIONS During 2006 NOAA/NOS ordered 133 Tide Stations including Main Stations, Redundant Gages & Hydrographic Gages., additional sensors, spares, & peripherals.</p>			2006	<p>Water level measurement systems monitoring the entire United States coast and other worldwide tidal projects.</p>

REPRESENTATIVE EXPERIENCE SUMMARY



NOAA/NOS 808 Principal Court Chesapeake, VA 23320 Mark Bushnell 757-436-0200 Mark.Bushnell@noaa.gov	SBIR			July 2006	Small Business Innovation Research Phase I Proposal "DCP Low Power & ow Cost Command Receiver"
NOAA/NOS/NMFS/OAE ACQUISITION DIVISION/OFA65 1305 East-West Highway SSMC-4, RM 7141 Silver Spring, MD 20910 Robin Prather, RLP 301-713-0820 x`126 Robin.Prather@noaa.gov	SBIR This SBIR is to provide an improved Water level measurement system. The SBIR topic is 8.4.2.N.			July 2006	Small Business Innovation Research Phase I, Proposal "Improved Water Level Measurement System"
US AIR FORCE MATERIEL COMMAND SHANE R. SMOOT, 1st Lt, USAF Tinker AFB, OK 73145-8760 shane.smoot@tinker.af.mil	DESIGN/MANUFACTURE OF PROTOTYPE WIND SENSOR for USAF <ul style="list-style-type: none"> ▶ 303 FMQ-13(v)2 Wind Sensors ▶ 35 FMQ-13(v)2 Sensor Spares ▶ 108 FMQ-13(v)2 Sensor support equipment ▶ Maintenance Training ▶ 1 Year of Technical Support 	FA8720-04-R-0002	\$1,339,739	January 2004 - May 2005	Design & delivery of field-tested prototype FMQ-13 Wind Speed & Wind Direction Sensors. Purpose: to gather data on horizontal wind direction & wind speed used in military base weather stations & flight line systems worldwide. Units integrate into operating FMQ-13 weather systems previously supplied by Sutron.
US AIR FORCE LOGISTICS COMMAND McClellan Air Force Base Sacramento, CA	SYSTEMS - 1000 WIND MEASURING SENSORS Developed & produced 1000 sensors and integrated/installed at all Air Force, Navy and Army Air Bases around the world.	F04606-85-C-0259		1985 to present	No moving parts digital wind measuring system at military air bases around the world.
WMO SIDS-CARIBBEAN PROJECT Francisco Villalpando Programme Manager World Meteorological Organization Geneva, Switzerland Tel. 4122 730 8309 Antigua & Barbuda, Barbados, Cuba, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines & Trinidad & Tobago.	SYSTEM: 32 AWS/AWOS/AGRI-MET STATIONS & 17 BASE STATIONS <ul style="list-style-type: none"> ▶ 21 Synoptic Weather Stations ▶ 11 Airport Weather Observation Stations at domestic airports ▶ 5 AWOS at international airports for Aeronautical weather analysis and forecasting ▶ 11 Agri-Met Stations ▶ 17 Data-Receiving Base Stations at Airport Meteorological Offices 	15.073-03/T/C Joint venture between WMO & Finland SIDS-Caribbean Project, (Preparedness to Climate Variability & Global Change in Small Island Developing States, Caribbean)	\$738,331	Sept 2003 with on-going support	Goal: build an extreme weather early warning system, provide real-time weather data at airports and strengthen the National Meteorological Services of SIDS countries in order, ultimately, to facilitate member countries' socio-economic development, to save lives & infrastructure and to provide support & improved planning for sustainable development. Sutron designed, manufactured, tested, integrated, installed, trained, and still maintains AWS, AWOS, Agri-Met & Synoptic Weather Systems, WMO-Compliant, in 13 Caribbean Countries.
KENYA Dr. Joseph Mukabana, Director Kenya Meteorological Department, Republic of Kenya P.O. Box 30259 Nairobi, Kenya Wilson Airport AWOS	AIRPORT WEATHER OBSERVATION SYSTEM PRIMARY DCP contains: <ul style="list-style-type: none"> ▶ Datalogger. Serial ports, FSK ports. Military connectors. ▶ Solar Panels, power supplies, batteries, lightning protection ▶ Communications (Radio Modems). ▶ Ultrasonic Wind Sensor on 10m tower, ICAO obstruction lights, ▶ AT / RH & radiation shield ▶ Barometric Pressure Sensor, w/vent ▶ Rain Gauge, tipping bucket & pedestal ▶ WMO class II Pyranometer ▶ Present Weather/Visibility/RVR Sensor ▶ Forward Scatter Sensor on 2.5m mast 			2007	Supply, Installation, Commissioning, Training & Support of Synoptic Automatic Weather Observing System (AWOS) at Wilson Airport Modular, open, distributed system provides excellent performance & a minimum of components, regardless of the number of new sensors, field stations or base stations added. Components can be added or removed without affecting system operation. System has commonality of components & uniform interface for collection, processing, display & distribution of any airport weather parameters. All data products are distributed to designated users and archived for study and analysis. SECONDARY WIND SITE DCP Includes: <ul style="list-style-type: none"> ▶ Communications (Radio Modems). ▶ Ultrasonic Wind Sensor (see previous)

REPRESENTATIVE EXPERIENCE SUMMARY



<p>SIDNEY HIGH SCHOOL 95 West Main Street Binghamton, NY 13838 Contact: Richard Townsend (607) 563-2135</p>	<p>REAL TIME FLOOD WARNING SYSTEM Xlite Data Recorders Satlink2 HD R Satellite Transmitters Raven CDMA/GSM Cellular Modems Temp/Humidity Sensors Atmospheric Pressure Sensors Rain Gauge Tipping Buckets Wind Sensors, Prop and Vane Pyranometers</p>			<p>June 2007 on-going & expanding</p>	<p>Designed, manufactured & provided training for a real time flood warning system for the upper Susquehanna River Basin, consisting of precipitation, atmospheric, light & wind sensors monitoring meteorological parameters in real time using high data rate satellite transmitters & cellular communications. This data is then used to determine and prepare for potential flood conditions. First part of school grant program that is expanding into 2008.</p>
<p>TEXAS A&M UNIVERSITY Div. of Nearshore Research Mr. Jim Rizzo jrizzo@lighthouse.tamucc.edu 6300 Ocean Drive Corpus Christi, Texas 78412-5799 (361) 825-5758</p>	<p>TIDE STATIONS 16 Tide Stations including Main Stations, Redundant Gages, & Hydrographic Gages, software Since 1989 Sutron has had an on-going Tide Station relationship with TCOON & has supplied the majority of TCOON's 26+existing stations in addition to this purchase.</p>			<p>2006</p>	<p>TEXAS COASTAL OCEAN OBSERVATION NETWORK (TCOON) Data is primarily used... ▶ to establish tidal datums; ▶ to provide high-quality waterlevel information; ▶ to prepare affected communities</p>
<p>COLOMBIA CVC (ordered via Comundial) Cra 56 No. 11-36 Cali - Colombia Contact: Diego Sarmiento 572-331-0199 diego@cvc.gov.com</p>	<p>GOES SATELLITE RECEIVE SITE ▶ 16-Channel DDRGS, accessories ▶ XConnect software</p>		<p>558505</p>	<p>January 2006</p>	<p>Supply DDRGS and Software data collection equipment to monitor rainfall for agricultural applications</p>
<p>USACE NEW ORLEANS Bill Emmett 7400 Leake Ave. New Orleans, LA 70118-3651 504-862-2201</p>	<p>LOCK MODERNIZATION PROJECT w/4 TYPES OF COMMUNICATIONS SIMULTANEOUSLY ▶ 12 Stations ▶ SatLink2 GOES Satellite Transmitters ▶ Iridium Modems ▶ Fiberoptic Modems ▶ Xpert Dataloggers</p>			<p>2006 /2007</p>	<p>Lock Modernization Project (in conjunction with Prime Controls) ▶ Sutron designed, supplied & installed 12 monitoring stations on New Orleans' primary drainage canals connecting the Mississippi River & Lake Pontchartrain. ▶ Integrated 3 Communication Options: GO ES Satellite, Fiberoptic & Iridium</p>
<p>CHINA Three Gorges Dam</p>	<p>465 (Total) Remote Monitoring Hydro-Met Stations ▶ Remote Stations with Xpert Dataloggers and bubbler type water level sensors ▶ Portable Weather Stations</p>		<p>\$2,020,742+</p>	<p>2004 on-going through 2009</p>	<p>In 2004 Sutron received sales orders to implement 120 stations. In 2007 Sutron received contracts from 3 customers in China totaling \$1,020,742 for equipment including dataloggers, sensors and ancillary equipment for 345 remote monitoring stations.</p>
<p>HONDURAS (ordered via Alfacom) Contact : Elise o Silvava eliseosilva@hotmail.com</p>	<p>GOES SATELLITE RECEIVE SITE ▶ DSR Receiver ▶ XConnect software with Database & Utilities</p>	<p>NA-002SUT</p>		<p>September 2006</p>	<p>Provide DDRGS to monitor rainfall and river flows for disaster mitigation application</p>

REPRESENTATIVE EXPERIENCE SUMMARY



<p>KENYA Dr. Joseph Mukabana, Dir. Kenya Meteorological Department, Republic of Kenya P.O. Box 30259 Nairobi, Kenya Phone: 254-20-3746113 Fax: 254-20-3748969 E-mail: kae@alandick.co.ke</p>	<p>TIDE STATION / TSUNAMI WARNING SYSTEM Turnkey Tide Station & Tsunami Early Warning System Project to measure water levels at 3 points along Kenya's coast for early warning of tsunamis & data collection crucial to monitor & predict meteorological & climatic events</p>			<p>2007 with on-going support</p>	<ul style="list-style-type: none"> ▶ 3 Tide Stations ▶ 1 Central Base Station ▶ Satellite transmitters using EUMETSAT ▶ GSM modems to transfer data to Central Station over local cellular network.
<p>SOUTH FLORIDA WATER MANAGEMENT DISTRICT Doug Wilkins 3301 Gun Club Road West Palm Beach, FL 33406 561-686-8800 x 4724</p>	<p>MODERNIZE SCADA SYSTEM Conceptual & Architectural Design Site Inspections Detailed Engineering Design, drawings & specifications Fabrication & Certification of integrated MOSCAD Control Panel Monitoring/Acceptance of Installation Software Development & Testing Final System Integration/Testing & Acceptance</p>			<p>On-going to September 2006</p>	<p>In 1998 the District began a program to modernize its proprietary SCADA systems that required new central SCADA computers and database systems to replace the C&C technology. Sutron was given the contract.</p>
<p>LEON COUNTY & CITY OF TALLAHASSEE Theresa Heiker LC Public Works Dept 2280 Miccosukee Rd Tallahassee, FL 32308 Telephone: 850-488-8003</p>	<p>CAPITAL AREA FLOOD WARNING NETWORK ▶ RF Radio Path ▶ Survey & Licensing ▶ 18 Automatic Rainfall Stations ▶ 1 Stream Gaging Station ▶ 1 Base Station with ▶ Flood Warning Web Posting System Software ▶ Installation & commissioning</p>			<p>2004 with on-going support</p>	<p>The project establishes the basic infrastructure for real-time rainfall data collection to facilitate the identification of developing flood conditions, notification for emergency managers and initiation of the appropriate emergency management response.</p>
<p>UNIV. OF PUERTO RICO CID R&D Center P.O. Box 9001 Mayaguez PR 00681-9001 Contact: Christa Von Hillenbrant (787) 833 8433 christa@midas.uprm.edu</p>	<p>GOES SATELLITE RECEIVE SITE ▶ DRGS RECEIVE SITE ▶ 6 NOS-Approved Tide Stations</p>	<p>1060656</p>		<p>January 2006</p>	<ul style="list-style-type: none"> ▶ Provided 6 tidal monitoring stations ▶ Provided data telemetry & DRGS Receive Site ▶ Stations are compatible with the extensive network operated with the US National Ocean Service (NOS) ▶ The NOS tide stations provide tsunami detection and immediate notification through the GOES satellite system ▶ Turnkey system
<p>UKRAINE Mr. Gregg Wiche District Chief, USGS 821 East Interstate Ave., Bismarck, ND 58503 Tel: 701-250-7401</p>	<p>FLOOD WARNING PROJECT ▶ METEOSAT Transmitters ▶ METEOSAT Satellite DSR ▶ Receiver, antenna, work stations, accessories & software ▶ Installation & Training ▶ XConnect Software</p>	<p>04CRSA0545</p>		<p>June 2004</p>	<p>Flood Warning System in the Ukraine, formerly part of the Soviet Union Ordered by the US Geological Survey on behalf of the Ukraine</p>
<p>STATE OF COLORADO 1300 Sherman Denver, CO 80203 Mr. James McDonald (303) 866-3585</p>	<ul style="list-style-type: none"> ▶ 250 DCPs with Satellite Telemetry ▶ GOES Receive Site, System Software 	<p>Multiple Contracts</p>	<p>\$2,500,000*</p>	<p>1984-2008</p>	<p>System provides real time data for managing all of the State of Colorado's water resources</p>

REPRESENTATIVE EXPERIENCE SUMMARY



COMPUTER SCIENCES CORPORATION 15245 Shady Grove Road Rockville, MD 20850 Jim McNitt 301-794-24367	<ul style="list-style-type: none"> ▶ DCPs/VHF ▶ Automatic Weather Stations ▶ System Software 	S800850	\$734,636	Nov. 2000	Automatic weather stations with satellite & VHF, Water and Weather Monitoring Stations for Flood Forecasting including System Software
LITTON PRC, Inc. 1500 PRC Drive McLean, VA 22102 Jason Tuell 703-556-1000	DCPs/VHF, Automatic Weather Stations, System Software	38803	\$714,018	May 2000	Automatic weather stations with satellite & VHF, Water and Weather Monitoring Stations for Flood Forecasting including System Software
CAYMAN ISLANDS Cayman Islands Meteorological Department Cayman Islands Civil Aviation Authority	AUTOMATIC WEATHER OBSERVATION SYSTEM (AWOS) FOR CAYMAN ISLANDS INTERNATIONAL AIRPORT Sensors: wind direction/speed, AT/RH, precipitation, barometric pressure, cloud height and horizontal visibility/RVR.			2003-2005 on-going support	Design, supply & install WMO-compliant AWOS including All Enclosures, DCP Components, Civil Works, Software, Manuals, Training & Support. Design, supply and installation of fully WMO-compliant Base Station in the Airport's Terminal.
VENEZUELA EDELCA Calle Caruachi Cruce Con Aro Edif. Edelda Pisa 7 Alta Vista, Pto. Ordaz Ing. Jose Rangel	150 DCPs with Satellite Telemetry & Sensors	086 60 3303 / 603269	\$2,500,000*	1994 - 2008	Hydromet stations for hydropower production & flood control purposes
INDIA India Meteorological Dept., Government of India Director General of Meteorology Mausam Bhavan, Lodi Road New Delhi-110003 INDIA Contact: Dr. R.D. Vashistha ramdhanvashitha@yahoo.co.in	AWS System with INSAT Satellite Transmitters <ul style="list-style-type: none"> ▶ 100 Automatic Weather Station Remote Terminal Units (RTU) ▶ INSAT satellite transmitter with antenna, cabling and mounting hardware ▶ Datalogger, Solar Equipment, Voltage Regulator, other electronic peripherals ▶ AWS equipment: sensors, signal conditioning, interfacing, data conversion, formatting, storage and transmission sub-system 	CPU/54/0903/ 4042/129F	\$1,511,594	Dec 2005	<ul style="list-style-type: none"> ▶ Provide extensive Met System including 100 Automatic Weather Stations ▶ Provide Receive Site to replace existing monitoring and warning system ▶ Uplinking AWS data to the satellite compatible with INSAT/KALPANA-1 DRT's (Annexure-II). ▶ Procuring AWS data reception (Earth Station) & processing equipment for installation at Pune. ▶ Installation, final checkout & commissioning of all field sites ▶ Providing spares, testing & measuring equipment ▶ Provide Data Conversion, Storage & Transmission System for unattended operation for at least 1 year using a 12V single-sealed battery. ▶ Built-in memory capable w/data storage for at least 12 mnths, retrievable on a PCMCIA card (or any compact solid state memory device). ▶ Built-in testing for monitoring & displaying functions

REPRESENTATIVE EXPERIENCE SUMMARY



<p>CANADA Craig Mitchell, B.Sc, Project Manager Water Control, Resource Science Section Toronto Region Conservation Authority 5 Shoreham Drive Downsview, ON M3N 1S4 Tel. 416-661-6600 cmitchell@trca.on.ca</p>	<p>WEB-CAM FLOOD WARNING SYSTEM w/5 PILOT SITES & BASE STATION Integrated into existing monitoring system</p> <ul style="list-style-type: none"> ▶ Automated remote hydro-met equipment, rain gauges & submersible pressure sensors ▶ Cellular IP-based modems ▶ Real-time data-processing software ▶ Remote & direct access to logger ▶ Web-based data & dynamic real-time web-reports w/graphical & tabular formats ▶ Voice, text, & web/email alarms ▶ Real-time live video camera ▶ Training - each station & components. 			<p>2006 / 2007</p>	<p>Scaleable flood warning system including web-based data & video for the toronto & Region Conservation Authority's 9 watersheds.</p> <p>Integrated new system into existing system & upgraded existing stations</p>
<p>SOUTH FLORIDA WATER MANAGEMENT DISTRICT 3301 Gun Club Road West Palm Beach, Florida 33406 561-686-8800 x 4724</p>	<p>MODERNIZE SCADA SYSTEM</p> <ul style="list-style-type: none"> ▶ Conceptual & Architectural Design ▶ Site Inspections ▶ Detailed Engineering Design, Drawings & Specifications ▶ Fabrication & Certification of Integrated MOSCAD Control Panel ▶ Software Development and Testing ▶ Monitoring & Acceptance of Installation Contract ▶ Final System Integration and Testing for Acceptance 			<p>2006</p>	<p>In the 1970's, the South Florida Water Management District (SFW MD) developed a proprietary Command and Control SCADA system, whose primary purpose was to support the District's flood-control mission. In 1998, the District began a program to modernize its proprietary SCADA systems that required new central SCADA computers and database systems to replace the proprietary C&C technology.</p>
<p>ITALY & IRAQ EUROGROUP S.P.A. Via Treviso 65 31057 Silea, Rome, Italy Contact: Luca Lussato +39 0422 4647 Luca.Lussato@Eurogroup.Com</p>	<p>METEOSAT RECEIVE SITE & STREAM GAUGING STATIONS</p> <ul style="list-style-type: none"> ▶ DD RGS ▶ Stream gauging equipment 			<p>January 2007 (part of larger contract to be awarded later in 2007)</p>	<p>Sutron provided 25 hydrological monitoring stations to the Iraqi Ministry of Water Resources as the initial installation of a large hydro monitoring system being built during 2007</p>
<p>US ARMY CORPS OF ENGINEERS 9501 John J. Pershing Dr. Omaha, NE 68112 Mr. Larry Murphy (402) 697-2685</p>	<p>1,435 DCPs with Satellite Telemetry, 3 GOES Rec Sites, System Software</p>	<p>Multiple Contracts and Locations</p>	<p>\$7,500,000*</p>	<p>1980-2008</p>	<p>Systems provide real time data for flood control purposes and basic data for design purposes. Covers all United States.</p>
<p>US GEOLOGICAL SURVEY 12201 Sunrise Valley Dr. Reston, VA 22092 Frank Henry</p>	<p>7,369 - DCPs & Dataloggers w/ Satellite/LOS/Phone/Telemetry</p>	<p>Multiple Contracts and Locations</p>	<p>\$36,500,000*</p>	<p>1995-2008</p>	<p>Systems monitor streamflow throughout the continental United States for design purposes.</p>
<p>US BUREAU OF RECLAMATION 1150 N. Curtis Road Boise, Idaho 83706 Mr. Jim Doty (208) 378-5272</p>	<p>1000 - DCPs GOES Receive Site Locations and System SW</p>	<p>Multiple Contracts and Locations</p>	<p>\$3,400,000</p>	<p>1980-2001</p>	<p>Systems provide real-time data for flood control, hydro power production and irrigation distribution. Installed in all Western States.</p>

REPRESENTATIVE EXPERIENCE SUMMARY



<p>PUERTO RICO USGS PR District Office (USGS in Reston VA) GSA Center 651 Federal Dr., Suite 400-15 Guaynabo, PR 00965 Mr. Pedro Diaz, District Chief (787) 749-4346 x222 Mr. John Parks, Tec h. Spec. 787-749-4457</p>	<p>PUERTO RICO AUTOMATED DAM DATA ACQUISITION & ALARM REPORTING SYSTEM <ul style="list-style-type: none"> ▶ 25 SatLink2 GOES Satellite Transmitter ▶ 15 Bubbler water level sensors ▶ 5 XLite Dataloggers ▶ XConnect open database software ▶ Sutron GO ES Satellite Receiver Station ▶ Sutron engineering services </p>	04ERCN0055		April 2004	<ul style="list-style-type: none"> ▶ The System obtains, monitors & analyzes, in real-time, critical data (i.e., inflows, outflows, gate openings, lake elevations) for 29 reservoirs. ▶ DCP & transmitter schedule all satellite transmissions. ▶ Data is collected and stored every 5 minutes & transmitted every hour. ▶ Because the last 2 hours of data is transmitted every hour, each transmission contains 1 hour of fully redundant data. ▶ Data is received by central servers & stored in a relational database hydrologic software with a graphical user interface for easy access.
<p>INDIA CWC, Central Water Commission of India Info Electronics Systems P-18, 1st Floor, Green Park New Delhi, India 110016 Mr. Naresh Goel 91 11 601-1997</p>	54 - Stations	ICB/DSARP/FF/ HOCN/ 1/9/8/ 52-13 18	\$1,584,421	Sep. 1998	System provides satellite transmitted data for flood forecasting in the Mahanadie and Chambal Basins. System consists of 21 rain only stations, 27 river stations, 5 river and rain stations and 1 weather station.
<p>CHILE DGAC, Direccion General de Aeronautica Miguel Claro 1314 Santiago, Chile</p>	29 Airport Weather Observation Systems for domestic airports & a GOES Satellite Receive Station	031DGAC98	\$912,077	July 1998	WMO-compliant Airport Weather Observation Systems provide real time data at domestic airports.
<p>BRAZIL SIMEPAR Centro Politecnico da UFPR Caixa Postal 318 80001-970 Curitiba-PR-Brazil Luis Carciso de Moraes 55 41 366 2122</p>	98 - DCPs GOES Receive Site	Multiple Contracts	\$1,327,000	1996-2001	Hydromet Stations for hydropower production and flood control purposes.
<p>SINGAPORE Meteorological Service Singapore P O Box 8 Singapore Changi Airport Singapore 9181 ROS</p>	50 - DCPs		\$250,000	Jun. 1993	Rainfall stations, Meteorological stations, Domestic and Military Airports
<p>INDIA Ministry of Defense Snow & Avalanche Study Est. (SASE) Research & Development Center HIMPARSAR Sector 37-A Chandigarh – 160 036 INDIA Contact: R.K. Garg saserdc@gmail.com</p>	SNOW & AVALANCHE STUDY 29 - DCPs, Automatic Weather Stations	Multiple Contracts	\$388,607	1998 - 2001	Automatic Weather Stations in the Himalayas, System Software and Services, INSAT Satellite

REPRESENTATIVE EXPERIENCE SUMMARY



<p>CANADA HYDRO-QUEBEC Pierre Ouellet, Ing. Automatismes de production 75 Rene Levesques ouest, Etage 11,</p>	<p>2 Compaq high performance servers 2 High Data Rate Digital Direct Readout Ground Station chassis New feed/LNA assembly with hardware signal splitting</p>			2002	
<p>INTERNATIONAL BOUNDARY & WATER COMMISSION Ken Rakestraw 915-832-4160 4171 North Mesa The Commons Building El Paso, TX 79902</p>	<p>▶ 70 Remote DCPs ▶ 2 (DDRGS) High Data Rate Digital Direct Readout Ground Stations</p>			2001	<p>Modernize existing hydrological data collection network for the Hydrographic Data Collection Rehabilitation Project along the border between the US & Mexico</p>
<p>COLOMBIA IDEAM Transversal 15, No.119-89 Bogota, Colombia Mr. Emigdio Collante Barraza</p>	<p>▶ 111 - DCPs ▶ GOES Receive Site and System Software</p>	Multiple Contracts	\$1,419,382	1998-2001	<p>Hydromet stations, Tidal stations, Agrimet stations and Climatological stations.</p>
<p>COLOMBIA Aerocivil Columbian Air Force c/o APCYTEL, Ltda., Carrera 29A No. 70A-87, Santafe de Bogota, D.C., A.A., 090526, Pedro Sarmiento, Tel: 57-1-311-78-64, Email: apcytel@elsitio.net.co</p>	2 AWOS plus VHF voice transmitter kits	AP010-12-2000		March 2001	<p>System monitors airport weather & other met parameters in real time using VHF systems. Provides & transmits real time data to pilots.</p>
<p>COLOMBIA Aerocivil Columbian Air Force c/o APCYTEL, Ltda., Carrera 29A No. 70A-87, Santafe de Bogota, D.C., A.A., 090526, Pedro Sarmiento, Tel: 57-1-311-78-64, Email: apcytel@elsitio.net.co</p>	▶ 4 AWOS with VHF voice transmitters & Base Station	POPAPCY 001-2003		2003	<p>Monitors airport weather & transmits data via VHF voice transmitter to pilots & Base Station.</p>
<p>PACIFICORPS Richard Freeman 925 S. Grape St. Medford, OR 97501 (503)813-6045</p>	▶ 19 permanent gaging stations with radio path telemetry			2001	<p>Upgrades to help the utility company comply with Oregon Water Resources licensing regulations pertaining to real time flow data for a network of canals that withdraw water from the North Umpqua River & its tributaries, Toketee Lake, 8 dams, 44 miles of waterways.</p>

REPRESENTATIVE EXPERIENCE SUMMARY



<p>PERU SENAMHI Servicio Nacional De Meteorologia e Hidrologia Lima, Peru Rafael Vera 511-471-5134</p>	<ul style="list-style-type: none"> ▶ 38 - Met Stations (GOES) ▶ 17 - HydroMet Stations ▶ 10 - Ocean Stations ▶ 65 - DCPs ▶ GOES Receive Sites 	<p>Multiple Contracts 011-L11-001-99-SENAMHI</p>	<p>\$1,517,784</p>	<p>2000 - 2001</p>	<p>Extensive system to provide automatic ocean, meteorological, and hydrological monitoring. Stations are installed along the coastal plains, in the Andes Mountains and at the headwaters of the Amazon River.</p>
<p>SWITZERLAND Swiss Meteorological Service Krahbuhlstrasse 58 CH8044 Zurich, Switzerland Peter Mueller</p>	<p>50 - Dataloggers (9000) and System Software</p>	<p>Multiple including 86000640-642</p>	<p>\$792,684</p>	<p>1990-1999</p>	<p>Primary Automatic Weather Stations in Switzerland including System Software</p>
<p>NEW ZEALAND Meteorological Service of New Zealand Tahi Road Paraparaumu Beach 6450 New Zealand Gordon Saggars 64 4 297 0129</p>	<p>43 - Dataloggers (9000)</p>	<p>Multiple including 9120</p>	<p>\$386,678</p>	<p>1990-1999</p>	<p>GMS Satellite, Automatic Weather Stations</p>
<p>LOWER COLORADO RIVER AUTHORITY P O Box 220 Austin, TX 78767 Ms. Anne Bolden (512) 473-3200</p>	<p>75 - DCPs with GOES, Phone & EDACS, 1 Base Station</p>	<p>Multiple Contracts</p>	<p>\$654,136</p>	<p>1997-2001</p>	<p>System provides rainfall and water level monitoring stations employing multiple communication paths from each sensor.</p>
<p>LOWER PLATTE S NRD 3125 Portia Street Lincoln, NE 68501 Mr. Paul Zillig (402) 476-2729</p>	<p>6 - DCPs with GOES/EDACS</p>	<p>No Number</p>	<p>\$100,097</p>	<p>Jan. 1999</p>	<p>System provides flood warning system for the region around Lincoln, Nebraska using existing EDACS augmented by GOES telemetry.</p>
<p>PACIFICORPS (OREGON) Hans Sebald 925 S. Grape St. Medford OR 97501 (503) 813-6045</p>	<p>System consists of 19 permanent gaging stations with sophisticated radio path telemetry</p>		<p>\$569,000</p>	<p>Aug, 2001</p>	<p>Upgrades to help the utility company comply with Oregon Water Resources Department (OWRD) licensing regulations pertaining to real time flow data for a network of canals that withdraw water from the North Umpqua River and its tributaries near Toketee Lake, including 8 dams and 44 miles of waterways</p>

REPRESENTATIVE EXPERIENCE SUMMARY



HONDURAS PNUD Programa de Las Naciones Unidas Para el Desarrollo Tegucigalpa, Honduras	15 - DCPs	0235-2000	\$96,336	Mar. 2000	Hydro Stations
PUEBLO OF ZUNI Conservation Project P O Box 339 Zuni, NM 87327-0339 Mr. Kirk Bemis (505) 782-5852	14 - DCPs, 3 - Base Stations			Nov. 1996	System provides network of rainfall and water level monitoring stations linked to master station for purposes of data collection, real time system monitoring and early flood warning alerts.
MEXICO SMN	Receive Site		\$1,400,640	Jul. 1991	GOES, DRGS, System Software & Services
METRO WASTEWATER Reclamation Dist. Of Denver 6450 York Street Denver, CO 80229-7499 Ms. Sharon Weakland (303) 286-3000	46 - Radio Telemetry	Multiple Contracts	\$237,561	1996-2001	Line of site RF to monitor the wastewater (sewage and stormwater runoff) coming into the treatment plant from the extended metropolitan area of Denver.
TARRANT REG. WATER DISTRICT 1022 N. Calhoun Street Fort Worth, TX 76106 Mr. Steve Sieja (817) 335-2491	23 - DCPs	444-6726, 444-6618	\$224,379	Jun. 1999	Provides flood monitoring system, collects hydrological, meteorological data making it available to NWS and TRWD.
TEXAS WATER DEV BOARD P. O. Box 13231 Austin, TX 78711 Mr. James Schiller (512) 463-3035	63 - DCPs	2882 580-8-1311 & 1312	\$302,955	Sep. 1998	System provides water level measurements on streams, rivers throughout the State of Texas
OREGON Columbia Basin Irrigation Project - SCADA	70 Sites, high powered VHF radio system, master station		\$375,000	1990	SCADA system reports upstream & downstream water levels & control releases of water from dams. Checks structures in Columbia Basin Irrigation Project. USBR & 3 irrigation districts use SCADA system to greatly increase efficiency of water operations. Includes master control center, control & monitoring centers at 5 district offices & RTUs at 70 sites. High-powered VHF radio System. This SCADA system provides centralized monitoring and control of the multiple canal irrigation network.