

National Marine Electronics Association

Approved 0183 Manufacturer's Mnemonic Codes

Yellow highlights indicate code is reserved by NMEA for future use

January 2023

3SN	3-S NAVIGATION
AAB	ASM SELECTIVE ADDRESSED MESSAGE (RESERVED FOR FUTURE USE)
AAR	ASIAN AMERICAN RESOURCES
ABB	ASM BROADCAST MESSAGE (RESERVED FOR FUTURE USE)
ACC	ASM COAST STATION CONFIGURATION COMMAND (RESERVED FOR FUTURE USE)
ACD	ACCORD SOFTWARE & SYSTEMS PVT. LTD.
ACE	AUTO-COMM ENGINEERING CORP.
ACR	ACR ELECTRONICS, INC.
ACS	ARCO SOLAR, INC.
ACT	ADVANCED CONTROL TECHNOLOGY
ADM	ASM VHF DATA-LINK MESSAGE (RESERVED FOR FUTURE USE)
ADI	ADITEL
ADN	AD NAVIGATION
ADO	ASM VHF DATA-LINK OWN-VESSEL REPORT (RESERVED FOR FUTURE USE)
AGB	ASM GEOGRAPHICAL MULTICAST MESSAGE (RESERVED FOR FUTURE USE)
AGI	AIRGUIDE INSTRUMENT CO.
AGL	ALERT GROUP LIST (RESERVED FOR FUTURE USE)
AHA	AUTOHELM OF AMERICA
AIP	AIPHONE CORP.
ALD	ALDEN ELECTRONICS, INC.
AMB	AMBARELLA INC
AMC	ALLTEK MARINE ELECTRONICS CORP.
AMI	ADVANCED MARINE INSTRUMENTATION, LTD.
AMK	ASM ADDRESSED AND BROADCAST MESSAGE AKNOWEGMENT (RESERVED FOR
	FUTURE USE)
AMM	AQUAMETRO MARINE GmbH
AMR	AMR SYSTEMS
AMT	AIRMAR TECHNOLOGY
AND	ANDREW CORPORATION
ANI	AUTONAUTICAL INSTRUMENTAL S.L.
ANS	ANTENNA SPECIALISTS
ANX	ANALYTYX ELECTRONIC SYSTEMS

ANZ ANSCHUTZ OF AMERICA

AOB	AEROBYTES LTD
APC	APELCO
APN	AMERICAN PIONEER, INC.
APO	AUTOMATED PROCEDURE OPTIONS (RESERVED FOR FUTURE USE)
APW	AUTOMATIC POWER, INC. / PHAROS MARINE
APX	AMPEREX, INC.
AQC	AQUA-CHEM, INC.
AQD	AQUADYNAMICS, INC.
AQM	AQUA METER INSTRUMENT CO.
ARL	ACTIVE RESEARCH LIMITED
ART	ARLT TECHNOLGIES GmbH
ARV	ARVENTO MOBILE SYSTEM A.S.
ASG	ASM COAST STATION CONFIGURATION STATUS GENERAL (RESERVED FOR FUTURE
	USE)
ASH	ASHTECH
ASM	(RESERVED FOR FUTURE USE)
ASP	AMERICAN SOLAR POWER
ASQ	(RESERVED FOR FUTURE USE)
ATC	ADVANCED C TECHNOLOGY, LTD
ATE	AETNA ENGINEERING
ATM	ATLANTIC MARKETING COMPANY
ATR	AIRTRON
ATV	ACTIVATION, INC.
AUC	AUTOMATED PROCEDURE CONTROL (RESERVED FOR FUTURE USE)
AUP	AUTOMATED PROCEDURE QUERY (RESERVED FOR FUTURE USE)
AUS	AUTOMATED PROCEDURE STATUS (RESERVED FOR FUTURE USE)
AVN	ADVANCED NAVIGATION, INC.
AWA	AWA NEW ZEALAND, LTD.
AXN	AXIOM NAVIGATION, INC.
BBG	BBG INCORPORATED
BBL	BBL INDUSTRIES, INC.
BBR	BBR AND ASSOCIATES
BDV	BRISSON DEVELOPMENT, INC.
BEC	BOAT ELECTRIC CO.
BFA	BLUEFLOW AMERICAS
BGG	BODENSEE GRAAVITYMETER GEOSYSTEMS GmbH
BGS	BARRINGER GEOSERVICE
BGT	BROOKES AND GATEHOUSE, INC.
BHE	BH ELECTRONICS
BHR	BAHR TECHNOLOGIES, INC.
BLB	BAY LABORATORIES
BMC	BMC
BME	BARTEL MARINE ELECTRONICS
BMS	BECKER MARINE SYSTEMS
BMT	AVENTICS GmbH (formerly Bosch Rexroth AG Marine Technique)
BNI	NEIL BROWN INST. SYSTEMS
BNS	BOWDITCH NAVIGATION SYSTEMS
BRM	MEL BARR COMPANY
BRO	BROADGATE, LTD
BRY	BYRD INDUSTRIES
BTH	BENTHOS, INC.
BTK	BALTEK CORP.
BTS	BOAT SENTRY, INC.

- BVE BV ENGINEERING
- BXA BENDIX-AVALEX, INC.
- CAI CAMBRIDGE AERO INSTRUMENTS
- CAT CATEL
- CBN CYBERNET MARINE PRODUCTS
- CCA COPAL CORP OF AMERICA
- CCC COASTEL COMMUNICATIONS CO.
- CCL COASTAL CLIMATE COMPANY
- CCM COASTAL COMMUNICATIONS
- CDC CORDIC COMPANY
- CDI CHETCO DIGITAL INSTRUMENTS
- CDL CDLTD INC
- CDS CENTRAL DIMMING SET (RESERVED FOR FUTURE USE)
- CEC CECO COMMUNICATONS, INC.
- CEI CAMBRIDGE ENGINEERING, INC.
- CFS CARLISLE AND FINCH COMPANY
- CHI CHARLES INDUSTRIES, LTD.
- CIN CANADIAN AUTOMOTIVE INSTRUMENTS
- CKM CINKEL MARINE ELECTRONICS
- CLR COLORLIGHT AB
- CMA SOC. NOUVELLE D'EQUIP. CALVADOS
- CMC COE MANUFACTURING CO.
- CME CUSHMAN ELECTRONICS, INC.
- CML CML MICROSYSTEMS, PLC
- CMN COMNAV MARINE, LTD.
- CMP C-MAP, s.r.l.
- CMS COASTAL MARINE SALES CO.
- CMV COURSEMASTER USA, INC.
- CNI CONTINENTAL INSTRUMENTS
- CNS C.N.S. SYSTEMS AB
- CNV COASTAL NAVIGATOR
- CNX CYNEX MANUFACTURING CO.
- CPL COMPUTROL, INC.
- CPN COMPUNAV
- CPS COLUMBUS POSITIONING, LTD
- CPT CPT, INC.
- CRE CRYSTAL ELECTRONICS, LTD
- CRO THE CARO GROUP
- CRY CRYSTEK CRYSTALS CORP.
- CSI COMMUNICATION SYSTEMS INTL
- CSM COMSAT MARITIME SERVICES
- CSR CSR STOCKHOLM
- CSS CNS INC
- CST CAST, INC.
- CSV COMBINED SERVICES
- CTA CURRENT ALTERNATIVES
- CTB CETEC BENMAR
- CTC CELL-TECH COMMUNICATIONS
- CTE CASTLE ELECTRONICS
- CTL C-TECH, LTD.
- CTS C-TECH SYSTEMS
- CUL CYCLIC PROCEDURE LIST (RESERVED FOR FUTURE USE IN DSC)
- CUS CUSTOMWARE

CWD CUBIC WESTERN DATA CWF HAMILTON JET CWV CELWAVE R.F., INC. CYL CYCLIC PROCEDURE LIST (RESERVED FOR FUTURE USE) CYZ CYZ, INCORPORATED DAN DANELEC MARINE A/S DAS DASSAULT SERCEL NAVIGATION-POSITIONING DBM DEEP BLUE MARINE DBE DENBRIDGE MARINE DCC DOLPHIN COMPONENTS CORP. DEB DEBEG GMBH DEC DECCA DIVISION, LITTON MARINE SYSTEMS, BV DFI DEFENDER INDUSTRIES, INC. DGC DIGICOURSE, INC. DGY DIGITAL YACHT LTD DGP DIGPILOT AS DME DELORME DMI DATAMARINE INTERNATIONAL DNS DORNIER SYSTEM GMBH DNT DEL NORTE TECHNOLOGY, INC. DOI DIGITAL OACEANS INC. DPC DATA PANEL CORP DPS DANAPLUS, INC. DRL R.L.DRAKE COMPANY DSC DYNASCAN CORP. DTN DYTECHNA, LTD DTW DATAWELL BV DYN DYNAMOTE CORPORATION DYT DYTEK LABORATORIES, INC. EAN EURO AVIONICS NAVIGATIONSSYSTEME GmbH EBC EMERGENCY BEACON CORP. ECR ESCORT, INC. ECI ENHANCED SELECTIVE CALLING INFORMATION (RESERVED FOR FUTURE USE) ECT ECHOTEC, INC. EDO EDO CORPORATION ELECTROACOUSTICS DIV. EEL ELECTRONICA EUTIMIO S.L. EEV EEV, INC. EEE **EXACTEARTH LIMITED** EFC EFCOM COMMUNICATION SYSTEMS EKC EASTMAN KODAK ELA WARTSILA ELAC NAUTIK GmbH (formally L-3 COMMUNICATIONS ELAC NAUTIK GmbH) ELD ELECTRONIC DEVICES, INC. ELM ELMAN s.r.l **EMC ELECTRIC MOTION COMPANY**

EMK

EMR

EMS

ENA

EPS

EMRI-AS DK

ENC ENCRON, INC.

EPM EPSCO MARINE

E-MARINE CO. LTD , (South Korea)

ELECTRO MARINE SYSTEMS, INC.

ENERGY ANALYSTS, INC.

SEIKO EPSON CORPORATION

EPL (RESERVED FOR FUTURE USE)

- EPT EASTPRINT, INC.
- ERC THE ERICSSON CORPORATION
- ERD eRide, INC.
- ESA EUROPEAN SPACE AGENCY
- ESC ELECTRONICS EMPORIUM, DIVISION OF ESC PRODUCTS
- ESY E-SYSTEMS, ECI DIVISION
- FDN FLUIDDYNE
- FEC FURUNO ELECTRIC CO.
- FHE FISH HAWK ELECTRONICS
- FJA INGENIEURBÜRO DIPL. ING. (FH) FRIEDRICH JANUS
- FJN JON FLUKE CO.
- FLA FLARM TECHNOLGY GMBH (SWITZERLAND)
- FLO FLOSCAN INCORPORATED
- FMM FIRST MATE MARINE AUTOPILOTS
- FMS FUGRO SEASTAR AS (MARINESTAR)
- FNT FRANKLIN NET AND TWINE, LTD
- FRC THE FREDERICKS COMPANY
- FSC FREQUENCY STATUS AND COMMAND (Reserved for future use may replace fss) 20200601
- FSS FREQUENCY SELECTION (RESERVED FOR FUTURE USE)
- FST FASTRAX OY
- FTG T.G.FARIA CORPORATION
- FTT FT- TEC
- FUG FUGRO INTERSITE B.V.
- FUJ FUJITSU TEN CORPORATION OF AMERICA
- FUR FURUNO USA. INC.
- FWG FORSCHUNGSBEREICH, WASSERCHALL AND GEOPHYSIK WTD 71
- GAM GRE AMERICA, INC.
- GCA GULF CELLULAR ASSOCIATES
- GCF GEOMETRY FREE COMBINATION
- GDC GNSS DIFFERENTIAL CORRECTION (RESERVED FOR FUTURE USE)
- GEC GEC PLESSEY SEMICONDUCTORS
- GEM GEM ELETTRONICA SRL
- GES GEOSTAR CORPORATION
- GFC GRAPHIC CONTROLS, CORP.
- GFV GFV MARINE LTD.
- GIL GILL INSTRUMENTS LIMITED
- GIS GALAX INTEGRATED SYSTEMS
- GNV GEONAV INTERNATIONAL
- GPI GLOBAL POSITIONING INSTRUMENT CORP.
- GPP GEO++ GmbH
- GPR GLOBAL POSITIONING SYSTEM JOINT PROGRAM OFFICE (ROCKWELL COLLINS)
- GRF GRAFINTA (SPAIN)
- GRM GARMIN CORPORATION
- GSC GOLD STAR COMPAPNY, LTD
- GTI GENESIS TECHNOLOGY INTERNATIONAL LTD
- GTO GRO ELECTRONICS
- GVE GUEST CORPORATION
- GVT GREAT VALLEY TECHNOLOGY
- HAI HYDRAGRAPHIC ASSOCIATES, LTD
- HAL HAL COMMUNICATIONS CORP.

- HAR HARRIS CORPORATION
- HHS HYDEL HELLAS SKALTSARIS LTD (SHANGHAI)
- HIG HY-GAIN
- HIL PHILIPS NAVIGATION A/S
- HIT HI-TEC
- HMS HYDE MARINE SYSTEMS, INC.
- HOM HOPPE MARINE GmbH
- HPK HEWLETT-PACKARD
- HRM
- HRC HARCO MANUFACTURING CO.
- HRT HART SYSTEMS, INC.
- HTI HEART INTERFACE, INC.
- HUL HULL ELECTRONICS COMPANY
- HWM HONEYWELL MARINE SYSTEMS
- IBM IBM MICROELECTRONICS
- ICO ICOM OF AMERICA, INC.
- ICG INITIATIVE COMPUTING USA, INC. INITIATIVE COMPUTING AG
- IDS ICAN MARINE (CANADA)
- IFD INTERNATIONAL FISHING DEVICES
- IFI INSTRUMENTS FOR INDUSTRY
- ILS IDEAL TEKNOLOJI BILISIM COZUMLERI A.S.
- IME IMPERIAL MARINE EQUIPMENT
- IMI INTERNATIONAL MARINE INSTRUMENTS
- IMM ITT MACKAY MARINE
- IMP IMPULSE MANUFACTURING, INC.
- IMR IDEAL TECHNOLOGIES INC
- IMT INTERNATIONAL MARKETING AND TRADING, INC.
- INM INMAR ELECTRONIC AND SALES
- INT INTECH, INC.
- IRT INTERA TECHNOLOGIES, LTD
- IST INNERSPACE TECHNOLOGY, INC.
- ITM INTERMARINE ELECTRONICS, INC.
- ITR ITERA, LTD
- IWW INLAND WATERWAYS (GERMANY)
- IXB IXBLUE
- IXS IXSEA
- JAN JAN CRYSTALS
- JAS JASCO RESEARCH LTD.
- JFR RAY JEFFERSON
- JLD JARGOON LIMITED
- JMC JAPAN MARINA CO
- JMT JAPAN MARINE TELECOMMUNICATIONS
- JPI J.P. INSTRUMENTS
- JRC JAPAN RADIO COMPANY, LTD
- JRI J-R INDUSTRIES, INC.
- JTC J-TECH ASSOCIATES, INC.
- JTR JOTRON RADIOSEARCH, LTD
- KBE KB ELECTRONICS, LTD
- KBM KENNEBEC MARINE COMPANY
- KEL KNUDSEN ENGINEERING, LTD
- KHU KELVIN HUGHES LTD

- KLA KLEIN ASSOCIATES, INC.
- KME KYUSHU MATSUSHITA ELECTRIC
- KML KONGSBERG MESOTECH LTD
- KMO KONGSBERG MARITIME AS
- KMR KING MARINE RADIO CORP.
- KMS KONGSBERG MARITIME SUBSEA
- KNC KONGSBERG NORCONTROLS
- KNG KING RADIO CORPORATION
- KOD KODEN ELECTRONICS CO., LTD
- KRA EDV KRAJKA
- KRP KRUPP INTERNATIONAL, INC.
- KST KONGSBERG SEATEX AS
- KVH KVH COMPANY
- KYI KYOCERA INTERNATIONAL, INC.
- L3A L3 COMMUNICATIONS RECORDERS DIVISION
- LAT LATITUDE CORPORATION
- L3I L-3 INTERSTATE ELECTRONICS COPORATION
- LCI LASERCRAFT INC.
- LEC LORAIN ELECTRONICS CORP
- LEI LEICA GEOSYSTEMS PTY LTD
- LIT LITTON LASER SYSTEMS
- LMM LAMARCHE MANUFACTURING CO.
- LRD LORAD
- LSE LITTLEMORE SCIENTIFIC ENG.
- LSP LASER PLOT, INC.
- LST LITE SYSTEMS ENGINEERING
- LTH LARS THRANE
- LTF LITTLEFUSE, INC.
- LTI LASER TECHNOLOGY, INC.
- LWR LOWRANCE ELECTRONICS CORP.
- MCA CANADIAN MARCONI COMPANY
- MCI MATSUSHITA COMMUNICATIONS
- MCL MICROLOGIC, INC.
- MDL MEDALLION INSTRUMENTS, INC.
- MDS MARINE DATA SYSTEMS
- MEC MARINE ENGINE CENTER, INC.
- MEG MARITEC ENGINEERING GmbH.
- MES MARINE ELECTRONICS SERV. INC.
- MEW MATSUSHITA ELECTRIC WORKS
- MFR MODERN PRODUCTS, LTD
- MFW FRANK W. MURPHY MFG.
- MGN MAGELLEN SYSTEMS CORP.
- MGS MG ELECTRONIC SALES CORP.
- MIE MIECO, INC.
- MIK MIKROLAB, GmbH
- MIR MIROS AS
- MIM MARCONI INTERNATIONAL MARINE
- MLE MARTHA LAKE ELECTRONICS
- MLN MATLIN COMPANY
- MLP MARLIN PRODUCTS
- MLT MILLER TECHNOLOGIES
- MMB MARSH-MCBIRNEY, INC.

- MME MARKS MARINE ENGINEERING
- MMI MICROWAVE MONOLITHICS
- MMM MADMAN MARINE
- MMP METAL MARINE PILOT, INC.
- MMS MARS MARINE SYSTEMS
- MMT MICRO MODULAR TECHNOLOGIES
- MNI MICRO-NOW INSTRUMENT CO.
- MNT MARINE TECHNOLOGY
- MNX MARINEX
- MOT MOTOROLA COMMUNICATIONS & ELECTRONICS
- MPI MEGAPULSE, INC.
- MPN MEMPHIS NET AND TWINE CO.
- MQS MARQUIS INDUSTRIES, INC.
- MRC MARINECOMP, INC.
- MRE MORAD ELECTRONICS CORP.
- MRL MARINE RADIO CO. LTD
- MRP MOORING PRODUCTS OF NEW ENGLAND
- MRR II MORROW, INC.
- MRS MARINE RADIO SERVICE
- MSB MITSUBISHI ELECTRIC CO., LTD
- MSF MICROSOFT CORPORATION
- MSE MASTER ELECTRONICS
- MSM MASTER MARINER, INC.
- MST MESOTECH SYSTEMS, LTD
- MTA MARINE TECHNICAL ASSOCIATES
- MTD MARITEL DATA SERVICES
- MTG MARINE TECHNICAL ASSISTANCE GROUP
- MTI MOBILE TELESYSTEMS, INC.
- MTK MARTECH, INC.
- MTL MARINE TECHNOLOGIES LLC
- MTR MITRE CORPORATION, THE
- MTS METS, INC.
- MUR MURATA ERIE NORTH AMERICA
- MVX MAGNAVOX ADVANCED PRODUCTS AND SYSTEMS CO.
- MXS MAXSEA INTERNATIONAL
- MXX MAXXIMA MARINE
- MYS MARINE ELECTRONICS CO SOUTH KORIEA
- NAG NORIS AUTOMATION GmbH
- NAT NAUTECH, LTD
- NAU NAUTICCAST (AKA NAUTICALL)
- NAV NAVTEC, INCORPORATED
- NCG NAVCERT GMBH
- NCT NAVCOM TECHNOLOGY, INC
- NEC NEC CORPORATION
- NEF NEW ENGLAND FISHING GEAR
- NGC NORTHROP GRUMMAN MARITIME SYSTEMS
- NGS NAVIGATION SCIENCES, INC.
- NIX L-3 NAUTRONIX
- NLS NAVIGATION LIGHT STATUS (RESERVED FOR FUTURE USE)
- NMR NEWMAR
- NMX NANOMETRICS
- NOM NAV-COM, INC.
- NOR NORTECH SURVEYS (CANADA)

- NOS NORTHERN SOLUTIONS AS
- NOV NOVATEL COMMUNICATIONS, LTD
- NRT NORTEK GROUP
- NSI NOREGON SYSTEMS INC
- NSL NAVITRON SYSTEMS LTD
- NSM NORTHSTAR MARINE
- NTI NORTHSTAR TECHNOLOGIES, INC.
- NTK NOVATECH DESIGNS, LTD
- NTS NAVTECH SYSTEMS
- NUT NAUTITECH PTY, LTD
- NVC NAVICO
- NVG NVS TECHNOLOGIES AG
- NVL NAVELEC MARINE SYSTEMS S.L.
- NVO NAVIONICS, s.p.a.
- NVS NAVSTAR
- NVT NOVARIANT, INC
- NWC NAVAL WARFARE CENTER
- NWS NETWAVE SYSTEMS BV
- OAR O.A.R. CORPORATION
- OBS OBSERVATOR INSTRUMENTS
- OCC OCCUPATION CONTROL (RESERVED FOR FUTURE USE)
- OCE MSM OCEAN
- ODE OCEAN DATA EQUIPMENT CORP.
- ODN ODIN ELECTRONICS, INC.
- OHB OHB SYSTEMS
- OIN OCEAN INSTRUMENTS, INC.
- OKI OKI ELECTRIC INDUSTRY CO.
- OLY NAVSTAR, LTD (POLYTECHNIC ELECTRONICS)
- OMN OMNETICS
- OMT OMNITECH AS
- ONI OMSKIY NAUCHNO ISSLEDOVATELSKIY INSTITUT PRIBOROSTROENIYA (RUSSIA)
- ORB ORBCOMM
- ORE OCEAN RESEARCH
- OSG OOCEAN SIGNAL LTD
- OSI OSI MARITIME SYSTEMS (was OFFSHORE SYSTEMS INTL)
- OSL OSI MARITIME SYSTEMS (was OFFSHORE SYSTEMS, LTD.)
- OSS OCEAN SOLUTION SYSTEMS
- OTK OCEAN TECHNOLOGY
- PCE PACE
- PCM P SEA MARINE SYSTEMS
- PDC PAN DELTA CONTROLS LTD
- PDM PRODELCO MARINE SYSTEMS
- RHM RH MARINE
- PLA PLATH, C.DIV OF LITTON
- PLI PILOT INSTRUMENTS
- PMI PERNICKA MARINE INSTRUMENTS
- PMP PACIFIC MARINE PRODUCTS
- PNI PNI SENSORS INC
- PNL POINTS NORTH, LTD
- POM POMS ENGINEERING
- PPL PAMARINE PRIVATE LIMITED
- PRK PERKO, INC.

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PSM
     PEARCE-SIMPSON
PST
     POINTSTAR A/S
PTC
     PETRO-COM
PTG
     P.T.I./GUEST
PTH
     PATHCOM, INC.
PVS
     PLANEVISION SYSTEMS
QNQ
     QINETIQ
QRC
     QINETIQ
     OUECTEL WIRELESS SOLUTIONS
OTM
QWE
     OWERTY ELEKTRONIK AB
QZM
Q2N
     QQN NAVIGATION ABS
RAC
     RACAL MARINE, INC.
RAE
     RCA ASTRO-ELECTRONICS
RAF
     ROBINS AIR FORCE (USAF)
RAK
     ROCKSON AUTOMATION, KIEL
RAY
     RAYTHEON MARINE COMPANY
RCA
     RCA SERVICE COMPANY
RCH
     ROACH ENGINEERING
RCI
     ROCHESTER INSTRUMENTS, INC.
RCQ
     QINETIQ
     USCG R&D CENTER
RDC
RDI
     RADAR DEVICES
RDM
     RAY-DAR MANUFACTURING CO.
REC
     ROSS ENGINEERING CO.
RFP
     ROLFITE PRODUCTS, INC.
RGC
     RCA GLOBAL COMMUNICATIONS
RGL
     RIEGL LASER MEASUREMENT SYSTEMS
RGY
     REGENCY ELECTRONICS, INC.
RHO
     RHOTHETA ELEKTRONIK GmbH
RLK
     REELEKTRONIKA.NL
RME
     RACAL MARINE ELECTRONICS
RMR
     RCA MISSILE AND RADAR
RSL
     ROSS LABORATORIES, INC.
RSM
     ROBERTSON-SHIPMATE, USA
RTH
     PARTHUS
RTN
     ROBERTSON TRITECH NYASKAIEN
RWC ROCKWELL COLLINS
RWI
     ROCKWELL INTERNATIONAL
SAA
     SATRONIKA SL
SAB
     VDE SATELLITE SELECTIVE ADDRESSED BINARY AND SAFETY RELATED MESSAGE
     (RESERVED FOR FUTURE USE)
     STN ATLAS ELEKTRONIC GmbH
SAE
SAF
     SAFEMINE
SAI
     SAIT, INC.
SAJ
     SAJ INSTRUMENT AB
     SAM ELECTRONICS GmbH
SAM
SAL
     CONSILIUM MARINE AB
SAP
     SYSTEMS ENGINEERING & ASSESSMENT, LTD
SAT
     SATLOC
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SBB VDE SATELLITE BROADCAST BINARY MESSAGE (RESERVED FOR FUTURE USE)

SBG	SBG SYSTEMS
SBR	SEA-BIRD ELECTRONICS, INC.
SBB	VDE SATELLITE BROADCAST (RESERVED FOR FUTURE USE)
SCC	VDE SATELLITE CONFIGURATION COMMAND (RESERVED FOR FUTURE USE)
SCL	SOKKIA COMPANY, LTD
SCM	SCANDINAVIAN MICROSYSTEMS AS
SCO	SIMOCO TELECOMMUNICATIONS LTD
SCR	SIGNALCRAFTERS, INC.
SDM	VDE SATELLITE VHF DATA-LINK MESSAGE (RESERVED FOR FUTURE USE)
SDN	SAPIEN DESIGN
SDO	VDE SATELLITE VHF DATA-LINK OWN-VESSEL REPORT (RESERVED FOR FUTURE USI
SEA	SEA, INC.
SEC	SERCEL ELECTRONICS OF CANADA
SEE	SEETRAC AKA GLOBAL MARINE TRACKING
SEL	SELECTION REPORT (RESERVED FOR FUTURE USE)
SEM	SEMTECH LTD
SEP	STEEL AND ENGINE PRODUCTS
SER	SERCEL FRANCE
SFN	SEAFARER NAVIGATION INT'L.
SGB	VDE SATELLITE GEOGRAPHICAL ADDRESSED BINARY AND SAFETY MESSAGE
OOD	(RESERVED FOR FUTURE USE)
SGC	SGC, INC.
SGN	SIGNAV
SHI	SHINE MICRO
SIG	SIGNET, INC.
SIM	SIMRAD, INC
SKA	SKANTEK CORPORATION
SKP	SKIPPER ELECTRONICS A/S
SLI	STARLINK INCORPORATED
SLM	STEERING LOCATION MODE (RESERVED FOR FUTURE USE)
SMC	SOLIS MARINE CONSULTANTS
SMD	SHIPMODUL CUSTOMWARE
SME	SHAKESPEARE MARINE ELECTRONICS
SMF	SEATTLE MARINE AND FISHING SUPPLY CO.
SMI	SPERRY MARINE, INC.
SMK	VDE SATELLITE ADDRESSED AND BROADCAST MESSAGE AKNOWEGMENT
~1,11 1	(RESERVED FOR FUTURE USE)
SML	SIMERL INSTRUMENTS
SMT	SRT-MARINE
SMV	SAFETYNET MESSAGE VESSEL (RESERVED FOR FUTURE USE)
SNP	SCIENCE APPLICATIONS INTERNATIONAL CORP
SNS	SAINSEL
SNV	STARNAV CORPORATION
SNY	SONY CORPORATION – MOBILE ELECTRONICS
SOM	SOUND MARINE ELECTRONICS
SON	SONARDYNE INTERNATIONAL LTD
SOV	SELL OVERSEAS AMERICA
SPL	SPELMAR
SPT	SOUND POWERED TELEPHONE
SRC	STELLAR RESEARCH GROUP
SRD	SRD LABS
SRP SRP	SYSTEM FUNCTION ID RESOLUTION PROTOCOL (RESERVED FOR FUTURE USE)
SRF	SIRF TECHNOLOGY, INC.
SRS	SCIENTIFIC RADIO SYSTEMS, INC.
NK N	

STANDARD RADIO AND TELEFON
(RESERVED FOR FUTURE USE)
SWEDISH SPACE CORPORATION
(RESERVED FOR FUTURE USE)
SAAB AB, SECURITY & DEFENSE SOLUTIONS, COMMAND AND CONTROL SYSTEMS
DIVISION
SEVEN STAR ELECTRONICS
VDE SATELLITE CONFIGURATION STATUS- GENERAL (RESERVED FOR FUTURE USE)
SEA SCOUT INDUSTRIES
SEPTENTRIO
STANDARD COMMUNICATIONS
SEA-TEMP INSTRUMENT CORP.
SEATECHNIK
STREAMLINE TECHNOLOGY, LTD
SI-TEX MARINE ELECTRONICS
STOWE MARINE ELECTRONICS
SAAB TRANSPONDERTECH AB
VDE SATELITE MESSAGE SENTENCE ACKNOWLEDGE MESSAGE
SAVOY ELECTRONICS
SWOFFER MARINE INSTRUMENTS
SWIFT NAVIGATION, INC
SAMYUNG ENC CO.,LTD
SYNERGY SYSTEMS, LLC
VDE TERRESTRIAL SELECTIVE ADDRESSED BINARY AND SAFETY RELATED MESSAGE
(RESERVED FOR FUTURE USE)
THOMPSON BROTHERS BOAT MFG.
TERRESTRIAL BINARY DATA
TAG BLOCK GROUPING STATUS AND COMMAND (RESERVED FOR FUTURE SENTENCE)
VDE TERRESTRIAL BROADCAST BINARY MESSAGE (RESERVED FOR FUTURE USE)
VDE TERRESTRIAL CONFIGURATION COMMAND (RESERVED FOR FUTURE USE)
TRADE COM MICHON OF MORWAY
TRADE COMMISSION OF NORWAY
TELEDYNE RD INSTRUMENTS
TIDELAND SIGNAL
VDE TERRESTRIAL VHF DATA-LINK MESSAGE (RESERVED FOR FUTURE USE)
VDE TERRESTRIAL VHF DATA-LINK OWN-VESSEL REPORT (RESERVED FOR FUTURE
USE)
PLESSEY TELLUMAT
THAT EGEL ECTRONIC OVERTIME COLLI
THALES ELECTRONIC SYSTEMS, GmbH
VDE TERRESTRIAL GEOGRAPHICAL ADDRESSED BINARY AND SAFETY MESSAGE
VDE TERRESTRIAL GEOGRAPHICAL ADDRESSED BINARY AND SAFETY MESSAGE (RESREVED FOR FUTURE USE)
VDE TERRESTRIAL GEOGRAPHICAL ADDRESSED BINARY AND SAFETY MESSAGE (RESREVED FOR FUTURE USE) TME SOLUTIONS CO LTD
VDE TERRESTRIAL GEOGRAPHICAL ADDRESSED BINARY AND SAFETY MESSAGE (RESREVED FOR FUTURE USE) TME SOLUTIONS CO LTD TECHNOLEADER SRL
VDE TERRESTRIAL GEOGRAPHICAL ADDRESSED BINARY AND SAFETY MESSAGE (RESREVED FOR FUTURE USE) TME SOLUTIONS CO LTD TECHNOLEADER SRL THRANE AND THRANE A/A
VDE TERRESTRIAL GEOGRAPHICAL ADDRESSED BINARY AND SAFETY MESSAGE (RESREVED FOR FUTURE USE) TME SOLUTIONS CO LTD TECHNOLEADER SRL THRANE AND THRANE A/A TOKYO KEIKI INC
VDE TERRESTRIAL GEOGRAPHICAL ADDRESSED BINARY AND SAFETY MESSAGE (RESREVED FOR FUTURE USE) TME SOLUTIONS CO LTD TECHNOLEADER SRL THRANE AND THRANE A/A TOKYO KEIKI INC TELESYSTEMS
VDE TERRESTRIAL GEOGRAPHICAL ADDRESSED BINARY AND SAFETY MESSAGE (RESREVED FOR FUTURE USE) TME SOLUTIONS CO LTD TECHNOLEADER SRL THRANE AND THRANE A/A TOKYO KEIKI INC TELESYSTEMS VDE TERRESTRIAL ADDRESSED AND BROADCAST MESSAGE AKNOWEGMENT
VDE TERRESTRIAL GEOGRAPHICAL ADDRESSED BINARY AND SAFETY MESSAGE (RESREVED FOR FUTURE USE) TME SOLUTIONS CO LTD TECHNOLEADER SRL THRANE AND THRANE A/A TOKYO KEIKI INC TELESYSTEMS VDE TERRESTRIAL ADDRESSED AND BROADCAST MESSAGE AKNOWEGMENT (RESERVED FOR FUTURE USE)
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VDE TERRESTRIAL GEOGRAPHICAL ADDRESSED BINARY AND SAFETY MESSAGE (RESREVED FOR FUTURE USE) TME SOLUTIONS CO LTD TECHNOLEADER SRL THRANE AND THRANE A/A TOKYO KEIKI INC TELESYSTEMS VDE TERRESTRIAL ADDRESSED AND BROADCAST MESSAGE AKNOWEGMENT (RESERVED FOR FUTURE USE) TRELLEBORG MARINE SYSTEMS TAMTECH, LTD
VDE TERRESTRIAL GEOGRAPHICAL ADDRESSED BINARY AND SAFETY MESSAGE (RESREVED FOR FUTURE USE) TME SOLUTIONS CO LTD TECHNOLEADER SRL THRANE AND THRANE A/A TOKYO KEIKI INC TELESYSTEMS VDE TERRESTRIAL ADDRESSED AND BROADCAST MESSAGE AKNOWEGMENT (RESERVED FOR FUTURE USE) TRELLEBORG MARINE SYSTEMS TAMTECH, LTD TRIMBLE NAVIGATION
VDE TERRESTRIAL GEOGRAPHICAL ADDRESSED BINARY AND SAFETY MESSAGE (RESREVED FOR FUTURE USE) TME SOLUTIONS CO LTD TECHNOLEADER SRL THRANE AND THRANE A/A TOKYO KEIKI INC TELESYSTEMS VDE TERRESTRIAL ADDRESSED AND BROADCAST MESSAGE AKNOWEGMENT (RESERVED FOR FUTURE USE) TRELLEBORG MARINE SYSTEMS TAMTECH, LTD

- TRC TRACOR, INC.
- TRS TRAVROUTE SOFTWARE
- TSG (RESERVED FOR FUTURE USE)
- TSI TECHSONIC INDUSTRIES, INC.
- TSS TELEDYNE TSS LIMITED
- TTK TALON TECHNOLOGY CORP.
- TTS TRANSTECTOR SYSTEMS
- VINCOTECH (FORMERLY TYCO ELECTRONICS) TYC
- TRANSWORLD COMMUNICATIONS TWC
- TWS TELIT LOCATION SOLUTIONS a division of TELIT WIRELESS SOLUTIONS
- TXI TEXAS INSTRUMENTS, INC.
- UBX U-BLOX AG
- UCG UNITED STATES COAST GUARD
- UEL ULTRA ELECTRONICS LTD
- UME UMEC
- UNF UNIFORCE ELECTRONICS CO.
- UNIDEN CORP. OF AMERICA UNI
- UNP UNIPAS, INC.
- URS URSANAV, INC
- VAN VANNER, INC.
- VAR VARIAN EIMAC ASSOCIATES
- VBC DOCKING SPEED LOG (RESERVED FOR FUTURE USE)
- VDB BERTOLD VANDENBERGH
- VCM VIDEOCOM
- VEA VARD ELECTRO AS
- VEC **VECTRON INTERNATIONAL**
- VEX **VEXILAR**
- VIS **VESSEL INFORMATION SYSTEMS**
- VMR VAST MARKETING CORP
- VSP VESPER MARINE
- VXS VERTEX STANDARD
- WAL WALPORT U.S.A.
- WBE WAMBLEE S.R.L. WBG WESTBERG MANUFACTURING,
- WBR WESBAR CORPORATION
- WEC WESTINGHOUSE ELECTRIC CORP.
- WEI WEIDMUELLER INTERFACE GMBH
- WEG WEGMATT LLC
- WCI WI-SYS COMMUNICATIONS
- WDC WEATHERDOCK CORP
- WHA W-H AUTOPILOTS
- WMM WAIT MANUFACTURING AND MARINE SALES CO.
- WMR WESMAR ELECTRONICS
- WNG WINEGARD COMPANY
- WOE WOOSUNG ENGINEERING CO LTD
- WSE WILSON ELECTRONICS CORP.
- WST WEST ELECTRONICS LIMITED
- WTC WATERCOM
- XEL 3XEL SRL

XIN XINUO INFORMATION TECHNOLOGY (XIAMEN) CORPORATION LIMITED

YAS YAESU ELECTRONICS

YDK YOKOGAWA DENSHIKIKI CO. LTD

YSH STANDARD HORIZON YAESU

ZNS ZINNOS