

No. 4217

NETHERLANDS
and
UNITED STATES OF AMERICA

Exchange of notes (with enclosures) constituting an agreement concerning United States radio equipment on Netherlands weather ships. Washington, 16 and 21 March 1955

Official text: English.

Registered by the Netherlands on 18 March 1958.

PAYS-BAS
et
ÉTATS-UNIS D'AMÉRIQUE

Échange de notes (avec pièces jointes) constituant un accord relatif au matériel de radio américain installé sur des navires météorologiques néerlandais. Washington, 16 et 21 mars 1955

Texte officiel anglais.

Enregistré par les Pays-Bas le 18 mars 1958.

No. 4217. EXCHANGE OF NOTES CONSTITUTING AN AGREEMENT¹ BETWEEN THE NETHERLANDS AND THE UNITED STATES OF AMERICA CONCERNING UNITED STATES RADIO EQUIPMENT ON NETHERLANDS WEATHER SHIPS. WASHINGTON, 16 AND 21 MARCH 1955

I

DEPARTMENT OF STATE
WASHINGTON

The Secretary of State presents his compliments to His Excellency the Ambassador of the Netherlands and has the honor to call to the latter's attention recent conversations between representatives of the Department of the Air Force and the Netherlands Air Attaché with regard to the equipping of Ocean Weather Ships stationed along the North Atlantic route with Ultra High Frequency (UHF) radio equipment for Air/Ground communications in the 200-400 megacycles band.

Jet aircraft being ferried in Operation High Flight for the Mutual Defense Assistance Program in support of NATO are equipped with only UHF radio equipment. Effective safety precautions for this operation call for availability of the air navigation and search-and-rescue facilities provided by all the Ocean Weather Ships stationed at points along the over-water portion of the flight path. However, since only United States vessels are equipped with UHF radio sets, the aircraft are currently unable to communicate with the Ocean Weather Ships of other nations.

The United States Air Force proposes to eliminate this hazard by lending to the Netherlands Ministry of Defense the R-361 UHF receivers, the T-282 UHF transmitters, and the ancillary items listed on the attached Annex,² on the understanding that the Netherlands Ministry will insure the prompt installation of this equipment on the Ocean Weather Ships provided by the Netherlands Government along the cited flight path, and that such equipment will be maintained and operated aboard such vessels by the Netherlands Government on a daily 24-hour receiving and transmitting service available for use by the United States Air Force. Sufficient equipment and maintenance parts to assure 100 % backup capability at all times will be provided by the United States Air Force.

¹ Came into force on 21 March 1955 by the exchange of the said notes.

² See p. 132 of this volume.

The Department of the Air Force is prepared to make this loan to the Netherlands Government on the understanding that this equipment, together with unexpended maintenance parts and ancillary facilities, will be returned to the United States Air Force within six months from the date of receipt of a request for such return.

The Department of the Air Force requests that a communication in the above sense be made to the Netherlands Ministry of Defense informing the Ministry that the Department of the Air Force will consider this note and the Embassy's reply thereto as constituting an agreement between the Government of the Netherlands and the Government of the United States. The Department of the Air Force further report that upon completion of the exchange of notes referred to above representatives of the Department of the Air Force and the Netherlands Air Attaché will undertake to make such further arrangements as may be necessary to implement the agreement.

Enclosures :

- 15 copies List of UHF Components for Ocean Station Vessels.
- 15 copies of Detailed Descriptions.

Department of State

Washington, March 16, 1955

ENCLOSURE 1

LIST OF UHF COMPONENTS FOR OCEAN STATION VESSELS

<i>Nomenclature</i>		<i>Quantity</i>
AS-505/GR	Antenna	2
AT-197	Antenna	2
RG-17/u	Cable	500 ft.
UG-495/u	Connector	8
MT-686/GR	Rack	2
MX-1058/u	Desk Shelf	2
J-390/GR	Distribution Panel	2
CG-707/u	RF Cable Assembly	4
CX-1541/u	Power Cable Assembly	4
CG-693/u	RF Cable Assembly	4
CX-2017/u	Special Purpose Cable Assembly	3
T-282/GR	Transmitter	2
MD-141/GR	Modulator-Power Supply	2
R-361/GR	Receiver	2
	Crystals for T-282/GR (freq. 243.0 mcs)	3
	Crystals for R-361/GR (freq. 243.0 mcs)	3

<i>Nomenclature</i>		<i>Quantity</i>
T.O. 16-30 GRR7-1	Operating Instructions-Radio Set AN/GRR-7 . . .	3
T.O. 16-30 GRR7-2	Service Instructions-Radio Set AN/GRR-7 . . .	3
T.O. 16-35 R361-3	Overhaul Instructions-Radio Receiver R-361/GR	3
T.O. 16-35 R361-4	Parts Catalog-Radio Receiver R-361/GR	3
T.O. 16-30 GRT3-1	Operating Instructions-Radio Set AN/GRT-3 . . .	3
T.O. 16-30 GRT3-2	Service Instructions-Radio Set AN/GRT-3 . . .	3
T.O. 16-35 T282-3	Overhaul Instructions-Radio Transmitter T-282/GR	3
T.O. 16-35 T282-4	Parts Catalog-Radio Transmitter T-282/GR . . .	3
One-year level for above equipment	Operational and Maintenance Spares	

Test Equipment peculiar to the above equipment, 1 set

ENCLOSURE 2

AS-505/GR & ()

DESCRIPTION

Antenna: AN Antenna AS-505/GR & (); vertically stacked array; for transmitting receiving; aluminum, olive drab paint finish; sectionalized, array consisting of 4 squirrel cage antennas; dimen 18'' diam × 12 lg; 4 sections, ea 18'' diam × 14'' lg; mts on Mast AB-158/GR or on a "class 2" telephone pole; fixed; freq range 225 to 400 mc; 52-ohm coaxial transmission line feed; special — has a gain of approx 6db, beam is tilted upward at an angle of 6 degrees; u/w various UHF radio sets; USAF Exhibit ENG-240. *Functional description:* Transmits and receives signals from a UHF transmitter and receiver operating over a frequency range of 225 to 400 mc.

AT-197/GR & ()

DESCRIPTION

Antenna: AN Antenna AT-197/GR & (); discone type; transmitting-receiving; material aluminum w/OD paint finish; sectionalized; dimen 10'' diam for upper section, 14'' diam for lower section, 2' high; twelve 1/4'' hex rods 5'' long mtd in a center support and equally spaced radially to form the top disk having an overall dimen of 10'', the lower element uses twelve 1/4'' hex rods 12'' long equally spaced radially at an angle of 30° from the center support to form an assimilated cone; has 2-1/2'' diam mtg clamp that fastens to top of various types of masts; fixed type; freq range 225-400 mc; input impedance 52 ohms from RF transmission line; special-designed for broadband operation

over the entire freq range; p/o Radio Set AN/GRC-27, AN/GRC-28, AN/GRC-29 & Radio Receiving Set AN/GRR-6; Mfr & Contr Allen D. Cardwell Mfg. Corp; USAF Exhibit WLENG-210 (in process); USAF Contract W-28-099-ac-81. *Functional description:* Omnidirectional broadband antenna for transmitting or receiving RF signals in the 225-400 mc range.

RG-17A/U

DESCRIPTION

Cable: R F: AN Radio frequency cable RG-17A/U : coaxial; 52 ohms impedance, 29.5 mmf/ft; max operating v 11,000 RMS; solid plain copper wire, 0.188" OD; outer cond : 0.760" maz OD, plain copper, single braid; polyethylene dielectric, 0.680" OD : outer covering : 0.870" OD, polyvinyl employing improved non-migratory plasticizers; designed for low temperature use; NME Spec JAN-C-17 w/exceptions. *Functional description:* Large high power low loss cable.

UG-495A/U

DESCRIPTION

Connector, plug: One round male; straight type ; 2.620" × 1 5/16 OD o/a; RF Connector, 50 ohms characteristic impedance; cylindrical, silver plated brass; "Rexolite", molded; .960" dia; 3/4"-20 NEF -2 int thd mates with UG-60A/U; AN Plug Connector UG-495A/U. *Functional description:* Terminates Radio Frequency Cable RG-17/U or RG-18/U.

MT-686/GR

DESCRIPTION

Rack: AN Rack MT-686/GR; relay rack; material aluminum w-blue-gray paint finish; empty; dimen 22" W × 20" D × 6' H; three compartments; p/o Radio Set AN/GRC-27 and Radio Set AN/GRC-28; USAF dwg 49C56349. *Functional description:* Two racks required. One houses Radio Receiver R-278/GR, Radio Receiver R-279/GR and Radio Set Control C-565/GR; the other houses Radio Transmitter T-217/GR, Modulator MD-101/GR and Power Supply PP-426/GR.

MX-1058/U & ()

DESCRIPTION

Shelf, desk: AN Desk Shelf MX-1058/U & () ; p/o Radio Set AN/GRC-27, AN/GRC-28, AN/GRC-29 and Radio Receiving Set AN/GRR-6; light weight metal; dimen 19" lg × 15" wd × 3" h when recessed in panel, the usable desk space dimen are

16" lg × 12" wd; mounts on front of any standard 19" relay rack, secures to rack by means of four (minimum) 12-24 screws; unit recesses into panel when not in use; Mfr & Contr Collins Radio Co; USAF Contract AF-33 (038)-6135. *Functional description:* Provides a means for mounting handsets, headsets and microphones. Can also be used as a desk.

J-390/GR & ()

DESCRIPTION

Panel, distribution: AN Distribution Panel J-390/GR & (); p/o Radio Set AN GRC-27; aluminum w/olive drab paint finish; input and output 115 or 230v, 50-60 cycle and audio; dimen 19" wd × 5-1/2" h × 3" d; mts in Rack MT-686/GR; Mfr & Contr Collins Radio Co; USAF Exhibit WLENG-234-A; USAF Contract AF 33 (038)-6135. *Functional description:* Standard 19-inch relay rack panel on which are mounted terminals for AC power, audio and control circuits. Used as a junction for connecting AC power from the mains and audio and control circuits from Control-Indicator C-806/GR to Radio Receiver R-278/GR or Modulator-Power Supply MD-129/GR when these components are mounted in Rack MT-686/GR.

CG-707/U (-ft.-in.) & ()

DESCRIPTION

Cable assembly, RF: AN RF Cable Assembly CG-707/U (-ft.-in.) & (); uses Radio Frequency Cable RG-8/U; length to be specified; terminates at one end in Amphenol connector 82-833 and at other end in RF Jack UG-60A/U; p/o Radio Set AN/GRC-27; Mfr & Contr Collins Radio Co; Exhibit WLENG-234 A; USAF Contract AF 33 (038)-6135. *Functional description:* Consists of a 2ft length to be used as a flexible RF extension.

CX-1541/U (-ft.-in.)

DESCRIPTION

Cable assembly, power: AN Power Cable Assembly CZ-1541/U (-ft.-in.); uses Underwriters type SO cable, two No. 14 AWG stranded cond, ea cond 41 strands No. 30 AWG has copper wire twisted together for flexibility, 400v working; length to be specified; terminates at one end in plug AN-3106A-18-3S, clamp AN-3057-8, and adapter AN-3055-18-8 and at other end in solder lugs; p/o Radio Set AN/GRC-27; Mfr & Contr Collins Radio Co; USAF Exhibit WLENG-234-A; USAF Contract AF 33 (038)-6135. *Functional description:* Connects Radio Receiver R-278/GR and Modulator-Power Supply MD-129/GR to Distribution Panel J-390/GR.

CG-693/U (-ft.-in.)

DESCRIPTION

Cable assembly, RF: AN RF Cable Assembly CG-693/U (-ft.-in.); uses Radio Frequency Cable RG-8/U; length to be specified; terminates at one end in Plug AN3108B-

18-16S and other end in AN 3108B-18-16P, ea end has clamps AN3057-6 and adapter AN3055-18-6; p/o Radio Set AN/GRC-27; Mfr & Contr Collins Radio Co; USAF Exhibit WLENG-210A and WLENG-234-A; USAF Contract AF33 (038)-6135. *Functional description:* Connects Modulator Power Supply MD-129/GR to Radio Transmitter T-217/GR.

CX-2017/U (-ft.-in.)

DESCRIPTION

Cable assembly, power, electrical: Okonite type cable, 14 ea conductors, stranded, (2 ea No. 12 AWG, 12 ea No. 16 AWG), individual insulation is rubber, rubber outer jacket; shield around all conductors, tinned copper braid; length to be specified, terminated at one end with 1 ea Connector, Receptacle AN3108B-36-1S, other end 1 ea Connector, Plug AN3108B-36-1P, with 1 ea Clamp AN3057-12 on each end; Radio Receptor Co., Brooklyn, N.Y., USAF Contract AF33 (038)-12792; USAF Exhibit ENG-246; u/w Transmitter T-282/GR and Modulator-Power Supply MD-141/GR. *Functional description:* A 4 ft length is used to connect Transmitter T-282/GR to Modulator-Power Supply MD-141/GR.

T-282/GR & ()

DESCRIPTION

Transmitter, radio: AN Radio Transmitter T-282/GR & (); AM type transmission; freq range 225 to 400 mc, single channel; power output: 100 w nominal; input: 115 v p/m 10 v, 230 v p/m 20 v, 50—60 cyc; rack mtd; dimen: 21" lg × 19" wd × 12-1/4" h, weighs 175 lb; crystal controlled, amplitude modulated class "C" final power amplifier stag p/o Radio Transmitting Set AN/GRT-3; Mfr & Contr Radio Receptor Co; USAF Exhibit ENG-246; USAF Contract AF-33 (038)-12792. *Functional description:* This unit together with Modulator-Power Supply MD-141/GR form a complete single channel radio transmitter. Separate crystals are required for each frequency. Crystal frequency is multiplied 27 times. Approximately 100w of RF power is available from the final stage which is plate modulated from the modulator-power supply.

MD-141/GR & ()

DESCRIPTION

Modulator-power supply: AN Modulator-Power Supply MD-141/GR & (): voice type modulator, electronic type modulator; modulator audio output: 60 w, a audio freq response 200-20,000 cyc p/m 4db; power supply; output 750v at 900 ma, full wave rectification, LC filter incl; modulator input impedance 500 ohms, output impedance 5,000 ohms (to match class "C" RF power output stage of Radio Transmitter T-282/GR modulator input power rating to speech amplifier-45 dbm (500 ohm at 0.001 w) filament power 6.3 v at 4 amp plate power 550 v at 250 ma, output power rating 60w; power supply input; 115 v or 230 v, 50-60 cyc, single ph, 1,700 w peak, 800 w nominal dimen: 21" lg × 19" wd × 12-1/4" h, weighs 200 lb; p/o Radio Transmitting Set AN/GRT-3; Mfr & Contr Radio Receptor; USAF Exhibit ENG-246; USAF Contract AF-33 (038)-

12792. *Functional description*: Amplifies audio frequency signals from a low impedance microphone to modulate the class "C" RF power amplifier in Radio Transmitter R-282/GR, rectifies the primary supply voltage and filters same to supply the high voltage required for use with RF oscillators, multipliers and power amplifier stages of Radio Transmitter T-282/GR.

R-361/GR & ()

DESCRIPTION

Receiver, radio: AN Radio Receiver R-361/GR & (); AM type signal; for communications; freq range 225 to 400 mc, for nominal 100 kc channel spacing; input 115 v p/m 10v, 230v p/m 20v, 50-60 cyc, single ph, 150 w; rack mt; dimen 19" lg × 15" wd × 1-1/2" h approx; 20 tube superheterodyne ckt; special — noise limiter, squelch operation, crystal controlled; u/w various UHF radio sets; USAF Exhibit ENG-245. *Functional description*: Crystal-controlled, amplitude modulated, superheterodyne radio receiver designed to receive signals, emanating from equipment in aircraft, over line-of-sight paths in the frequency range of 225 to 400 mc with an output level sufficient to operate a loudspeaker such as used in control towers.

II

ROYAL NETHERLANDS EMBASSY
WASHINGTON 9, D. C.

The Netherlands Ambassador presents his compliments to the Honorable The Secretary of State and has the honour to acknowledge the receipt of Mr. Dulles' note of March 16th, 1955 with regard to the equipping of Ocean Weather Ships stationed along the North Atlantic route with Ultra High Frequency (UHF) radio equipment for Air/Ground communications in the 200-400 megacycles band, reading as follows :

[See note I]

In reply, Dr. van Roijen has the honour to state that the provisions set forth in the note of the Secretary of State are acceptable and that the Government of the Netherlands concur with the proposal that Mr. Dulles' note and this reply constitute an agreement between the Government of the Netherlands and the Government of the United States. It has also been duly noted that upon completion of this exchange of notes the representatives of the Department of the Air Force and the Netherlands Air Attaché will undertake to make such further arrangements as may be necessary to implement the agreement.

Washington, D.C., March 21, 1955