

RESTRICTED - NATO

COPY NO. 1

NORTH ATLANTIC MILITARY COMMITTEE

1245

COMITE MILITAIRE DE L'ATLANTIQUE NORD

Standing Group

Groupe Permanent

SGM-236-57

3 April 1957

MEMORANDUM FOR THE SUPREME ALLIED COMMANDER ATLANTIC

SUBJECT: Amendments to ACP 167

References: a. SACLANT SER 918 of 23 Dec 52
b. SACLANT SER 1122 of 22 Oct 53

1. The Standing Group has considered the references.
2. The SACLANT proposals were recognized as timely and logical efforts to overcome the lack of clarity in several technical terms employed in military communications.
3. The interval which has elapsed since receipt of the proposals is indicative of the difficulty encountered in obtaining definitions which would be mutually accepted.
4. Enclosed is a copy of a report by the Communications Publications Panel which includes the discussion and conclusions. The conclusions have been accepted by the Standing Group and will be incorporated in ACP 167(A), a revision of ACP 167 which is now being considered for acceptance.

FOR THE STANDING GROUP:

C. H. SAMPSON
Commander, U.S. Navy
Deputy Secretary

CHS/md

312.71

Sec 1

DISTRIBUTION: A E1,2,3 G H1,2

NO LONGER EFFECTIVE

RESTRICTED - NATO
SGM-236-57

- 1 DOCUMENT DESTRUCTION MEMO: # 352
4 Sept 63

DECLASSIFIED-PUBLIC DISCLOSURE IMSM-0001-2006 DECLASSIFIE-MISE EN LECTURE PUBLIQUE

ENCLOSURE

AMENDMENTS TO ACP 167 - SACLANT REQUEST

Report by the Communications Publications Panel to the CEC, SGN

THE PROBLEM

1. To consider SACLANT proposals for amendments to ACP 167 in letters Ser 1122 dated 22 Oct 53 and Ser 918 dated 23 Dec 52.

FACTS AFFECTING THE PROBLEM

2. SACLANT proposes that the following words be given new definitions:

- (a) Radio Doppler
- (b) Radio Navigation Aid
- (c) Electronics
- (d) Signal (noun)
- (e) Signal (verb)
- (f) Signals (collective noun)
- (g) Signal(s) (adjective)

3. SACLANT also proposes that a suitable all-embracing term be adopted or if necessary coined to replace the following loosely synonymous terms:

Radio
Wireless
Communications
Signals
Electronics
Communications-Electronics

DISCUSSION

4. (a) Radio Doppler

It is agreed that the present wording should be improved. However, the SACLANT proposal is too cumbersome and no more precise than the original. An alternative proposal is given in 5(a) below.

(b) Radio Navigation Aid

It is agreed that this should be defined but the term "Radio Navigational Aid" would be more grammatical. SACLANT proposed "any system depending on the reception of radio waves and designed for use in aiding navigation". Such a definition would not be accurate in that a navigational aid need not be a system nor does it necessarily depend upon reception of radio waves. A preferable definition is given in 5(b) below.

(c) Radionavigation

The SACLANT objection to the present definition is supported. However it is not agreed that the term should be deleted if Radio Navigational Aid is to be included. A proposed new definition is given in 5(c) below.

(d) Electronics

The SACLANT proposed definition implies that what we now call "Electrical Physics", most modern "Atomic Chemistry" and all "Electrical Engineering" should in future be called "Electronics". It would be manifestly nonsensical to let alternators, electric bells and pop-up toasters be called "electronic devices". The existing definition in ACP 167 with a slight addition as given in 5(d) below is preferred.

(e) Communications-Electronics VS Signals, etc.

It is agreed that it would be desirable to adopt an all-embracing term to replace the several now in use. However, agreement on a such term cannot be reached. In any case a single term is not considered to be essential. The two most widely used expressions to cover the communication field are "Communications-Electronics" and

"Signals". There is general agreement that these two terms are regarded as synonymous. The proposed solution is given in 5(e) below.

- (f) Signal (noun). Signal (verb). Signals (collective noun). Signals (adjective)

General agreement on additional precise definitions of the various forms of this word could not be reached. It is considered that acceptance of the conclusion regarding Communications-Electronics/Signals, at paragraph 5(e) below, would obviate the need for any further change in this regard.

CONCLUSIONS

5. It is concluded that the following changes should be made to ACP 167:

- (a) Radio Doppler

Substitute the following definition:

"The determination by Doppler Principles of the radial component of the relative velocity of an object from observation of the change in frequency occurring on reflection or emission of radio waves from that object."

- (b) Insert in alphabetical sequence:

Radio Navigational Aid

Any radio facility designed or useable for navigation."

- (c) Radionavigation

Substitute the following definition:

"The use of radio facilities for determination of position, velocity, direction or for obstruction warning in navigation."

(d) Electronics

Modify the present definition to read:

"A generic term to describe that branch of electrical science and technology which treats of the behaviour of free electrons in vacuous or gaseous space and in semi-conductors and the circuitry associated therewith."

(e) Amend paragraph 1 of the FOREWORD as follows: ACP 167, GLOSSARY OF COMMUNICATIONS-ELECTRONICS TERMS (see note), is a RESTRICTED nonregistered publication ... etc, and add the following below paragraph 5:

Note: The term SIGNALS is synonymous with the term COMMUNICATIONS-ELECTRONICS. Although the former term will not be used in the preparation of ACPs, the term COMMUNICATIONS-ELECTRONICS, wherever appearing in ACPs, may be regarded as interchangeable with the term SIGNALS.

RECOMMENDATIONS

6. It is recommended that:
 - a. The conclusions in paragraph 5 above be approved.