MEMORANDUM FOR MR RHOADS   22 August 1948

Subject: Comments in Passing on Draft of "Proposed Technical
Manual TM 12 -( ) Radio Intelligence."

#3. The definition of R/I is <u>not</u> that of the Army Navy Descriptive
dictionary of cryptologic terms.

#6. Where is the appendix 1 "Glossary of R/I Terms" and what will it
adhere to when and if finished?

#10-b The Radio Traffic analysis team apparently does everything: T/A
plus evaluation. Shouldnt it be a pyramid #   <u>Evaluation</u> * * *Collateral Info.

<u>T/A</u> . . . . .<u>Crypt</u>

DF   Intercept
(Traffic and intercept control)

What does 10-A do? Administrate only? From description they seem to also
evaluate. If they decide as to what will be done they are above the
evaluation phase whereever it is done.

#13. What about radar,guided missiles,facsimile etc ad nauseam? What
and who will intercept them or is the paras definition of "any mode of
radio transmission" ambiguous. Leaving out radar,guided missiles etc
which is a mistake but apparently established policy, this should read
"radio communications" which infludes facsimile and radio telephone.
In connection with facsimile please note a MIS Technical Digest
talked about use of plane bourne facsimile for sending in photorecce
results which was in experimental stage over two years ago.

In first sentence of this paragraph should"radio intelligence
equipment" read "radio intercept e quipment"? I thought intelligence was
a function of the intellect with no mechanical equipment as a substitute.

#15. Direction finders. To me both "portable" and "mobile" imply the
idea of transportability. Is "Fixed" and"mobile" a better distinction or
is "long range" and "short range" even better. Within short range D/F equipment
you will have variation in size as for example the German Radio Defense Corps

used both D/F vans (covered trucks with "mobile sets inside) and suites and even coat pocket sets for extremely close range work against agents. The entire problem of agent rad o traffic requires serious consideration and should certainly be included in any tactical R/I Manual. The Germans started World War II with both Abwehr, G stapo and regular police (Orpo) organizations for dealing with agents. A special "Radio Defense Corps had o be created with several companies of signal corp specialists in D/F,interception, t/a,and cryptanaysis within the OKW (OKW/AgwNV/Fu III) to deal with agent traffic in Germany and occupied territory in France, Poland, Scandinavia etc. Even so in 1944 it was necessary to pull one entire signal i telligence regiment out of the German Army Signal Intelligenc organization on the eastern front (KONA 6) and assign it exclusively to Russian agent traffic because of the extremely large scale use of agents by the Russians. As Russia is the assumed potential enemy for the purposes of this R/ I manual the entire matter of agent traffic should be considered in the fullest detail. Monitoring of agent traffic gave the Germans tactical intelligence on Russian intent, future areas of major attack etc.

#16. Is the third sentence grammatical? And who is the assumed enemy here. And isnt this entire manual confused on distinction between high level(strategic) communications intelligence operations and low level(operation or tactical) radio intelligence activities?

#17 More questions arise as to distinction between strategical and tactical and will not be mentiored further in these comments. Should it be Strateguc,Operational, and Tactical with operational and tactical belonging to the field of the radio intelligence teams(for whom this manual is intended) and strategical and operational(yes,there is overlap—overlap and continuity are equally important for communications intelligence) intelligence which the "fixed stations and ASA itself are charged with?

#17-a Does the R/I company supply Army Group or does the Theatre
ASA feed theater and Army Group and the R/I company work from division up
through Army?

. Doesnt this imply that the R/I Company is only concerned with ground
force traffic? What about air-ground liaison nets, and the entire field
of overlapping intelligence from army air and naval nets to say nothing of
the Police (if the enemy is Russia?) I get the feeling these R/I teams
are going to be working in a little vacuum all b themselves and not
getting anywhere.

#7-/a-1 Does the last sentenc imply that ASA is assigning the mission
for front line R/I companies?

#7-a-4 What is "further counterintolligence of our own radio
communications?"Is it communications security, dummy traffic,fake traffice,
etc?

#7-b Same remarks about Army Navy Air and Police as were raised
for 17-a. The Germas said that monitoring Russian internal commercial nets
gave their operational forces very little information although it was of
value to strength estimates—and the Germans did not have a true
strategic airforce. I question if it should be included in an operational level
manual,however. Should there by T/Osand T/Es for each type ofR/I
outfit mentioned here and elsewhere? And wouldnt tables of T/OandE
eliminate the need for a lot of this text?

It again sems unfortunate that all emphasis is placed on enemy ground force
nets without indication of inter relationship between ground air and police
and possibly naval and partisan or agent nets.

Further in re 18-b-1 you do not obtain and evaluate radio intelligence information
solely by ////////"intercepting and finding locations of enemy commercial
and Army high echelon radio communications", such information is
presumably availableäong before the R/I companies get into the field.

18-b-4. Aside from the hope that training would be completed before the R/I company gets to the field, shouldnt such training as this be listed as the responsibility of the commanding officer,partic ulalry the liaison aspect, rather than as a part of the general mission of the entire company?

19. This sounds like badly written personnel management—the field R/I company will be AO a military unit and b) too busy for the excellent suggestions contained here.The very level(low echelon) of traffic and the nature of the work will force a close connection between the intercept operator and the T/A people anyway. I am still confused on the difference between intercept control, t/a and crypt in deciding what to cover etc.. For example, both the TA section in para 19 b 3 and the operation control section in 19 are directing coverage? and crypt and G-2 requirements are not yet included. Again TA and operation nd control are evaluating, assigning missions etc. In 19-b-2 we hear of data from "all possible sources" failing any other mention in this manual of captured documents, p/w interrogation investigation of ene my equipment etc is this where such collateral material is scanned? And who gets it for then,through what channels or do they hope an enemy tank crashes over an antenna and they loot the contents—if a plane crashed on their antenna they would presumably not be intersted in the contents since the are only ground force. Nuts. 19-c 3 raises the linguistic proble, where will they get dictionaries,new vocabulary items etc? c-4 indicates cryp reports to TA for forwarding to G-2 and for eval uation—does this mean the TA team does the evaluation and the G-2 man accepts it or will the hi gher level G-2 not get the decode without comment for his own evaluation?

25. ASA interests again-in conflict with field G-2 requirements?

25.2 "The radio spectrum is scanned for traffic".What kind of traffic, r/t or w/t,what about anything else. Cf German definition of signal intelligence

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as "concerned with every manifestation in the radio spectrum".

And also, what about wire tapping at the front line level.

    25.b.2 Is this sample message proper in a restricted manual?

    26. The manual is forever talking about the ASA sub-section—
but the ASA-subsection is not described until Sec XI—shouldnt it be
described at the first if it is the superior organization?

    30-A Hurrah. Intercept non-morse.⟂

    36. The ASA-sub-section. Only a general criticism here—but
in general the duties and functions are very vague. Would a field commander
from reading this know what the few individuals who turn up as his "ASA
sub section" are supposed to be doing? The description in para 37 appears
confused—is this ASA sub section to work at Army Group,Army, theater
division or what level? What rank will the officers hold etc?

    38. Functions of ASA sub-section are pretty general but what about
collateral information to be passed to ASA and down to RI companies as PW
interrogation, captured documents, enemy equipment and so on—shouldnt this
all come through the ASA sub section?

    39. Again we have G-2 and ASA desires being formulated. This is almost
solely on the intelligence side—who will correlate crypto security
and the needs and requirements of the signal officer at th same level?

    Generally, the ASA sub section appears to be concerned solely with
ground force re uirements. Isnt the ASA sub section the place to look for
coordinating Air and Police nets and exchanging information on naval if the
RI companies are only going to be concerned with ground?

    42. Claims for radio intelligence advanced here can raise plenty
of eyebrows,particularly since RI has not been integrated with other
sources of i telligence even for briefing purposes. I think there
should be some discussion of the role of radio inelligence in relation

other sources of intelligence-- if only to indicate hat they are and
indicate what mutual benefits will be derivable by each from anexchange of
results. For exam.le, from the LN Abt 353 papers there are illustrations of
signal intelligence, by D/F, attempting to locate radar transmitters, to
correlate with TA information on radio circuits concerned with ⅅⅣ/ radar bearing
sets in operation. Radar search results, measuring the impulses used, the
tone or note of the transmitter concerned were coordi ated with the signal
intelligence results and photo reconnaisance material, which shows
typical radar sites clearly, was also integrated. PW statements about
new radar equipment (IFF in planes) were cited, and crashed air craft were
examined for any equipment contained, the end product was presented in
a single "signal Intelligence " report on Russian Radar.

44 and following deals with movement of RI companies in attack
etc. I should think that the ETO histories of RI Units would have
interesti illustra ive material. When "island hopping" is mentioned
you wonder just which war time manual is being copied verbatim? Or will
we island hop to Moscow? A d here,too, in a combined operation with he
navy there is no indication that any enemy naval circuits wi.ll
be of any interest to signal intelligence.

46 and 47. The saddest paragraphs of the paper for what is unsaid.
On liaison and cooperation compare the frequent and recurring remarks
put in above.