

TEL: (416) 475-9420
TELEX: 06-966849
Cable: Monweir-Markham
FAX: (416) 475-2535



MARATHON MANAGEMENT COMPANY
(A SUBSIDIARY OF MARATHON WATCH COMPANY LTD.)
67A STEELCASE RD. WEST, MARKHAM, ONT. L3R 2M4

August 23, 1989

Nuclear Regulatory Commission
1 White Flint North
11555 Rockville Pike
Rockville, MD 20852

Attention: Floyd Deschamps (301) 492-0503

Dear Mr. Deschamps,

Enclosed please find an amendment to our license application; you already have our application for license for compasses and all applicable paperwork. The license is urgently needed to distribute watches to the Department of Defense and the General Services Administration. We are now bidding on two solicitations for watches.

The following is a short description of manufacturing and transportation for the watches:

- 1) Watches will be made at: Gallet & Co.
2301 La Chaux-de-Fonds
Switzerland
- 2) Then go to: Tritium Vuilleumier
La Chaux-de-Fonds

Where the tritium will be applied and watches will be examined by DCAS in Switzerland.

- 3) Then shipment will go to: M.I.S.C. Inc.
Contact: Anne C Kerrigan 643 Dunkle Street TEL: (717) 232-4719
Thomas M. Kerrigan Harrisburg, PA 17105 FAX: (717) 232-4722

To be military packed and checked by Government packaging inspectors. (Description of premises of M.I.S.C. enclosed).

- 4) Then shipment goes to: Government Destination.

We hope this information is to your satisfaction.

Yours truly,
MARATHON WATCH COMPANY LTD.


Leon Wein

/lz

Encl.

9002020280 900130
PDR FOIA
BICKMAN90-11 PDR

P.S. Additional information on the compass will be sent to you very shortly.

280

A/b

643 DUNKLE STREET HARRISBURG, PA 17105
P.O. BOX 3823
(717) 232-4719

P.O. Box 3823
Harrisburg, Pa. 17105

Number Years in Business Going into 5th year
Incorporated under the PA. STATE LAWS

Security System:

Building wired with alarm system, no sprinkler system.
Facility enclosed with six foot chain link fence.
On the grounds security tenant. Company employee lives in apt.
attached to grounds.

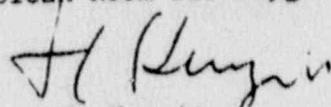
Brief History:

Prime Contractor with:
Navy Ships Parts Control Center-Mechanicsburg, Pa, \$500,000 Yearly in contracts.
Sub-Contractor with many other Gov't installation including Airforce and Army.

Sub-Contractor - on-going concerns

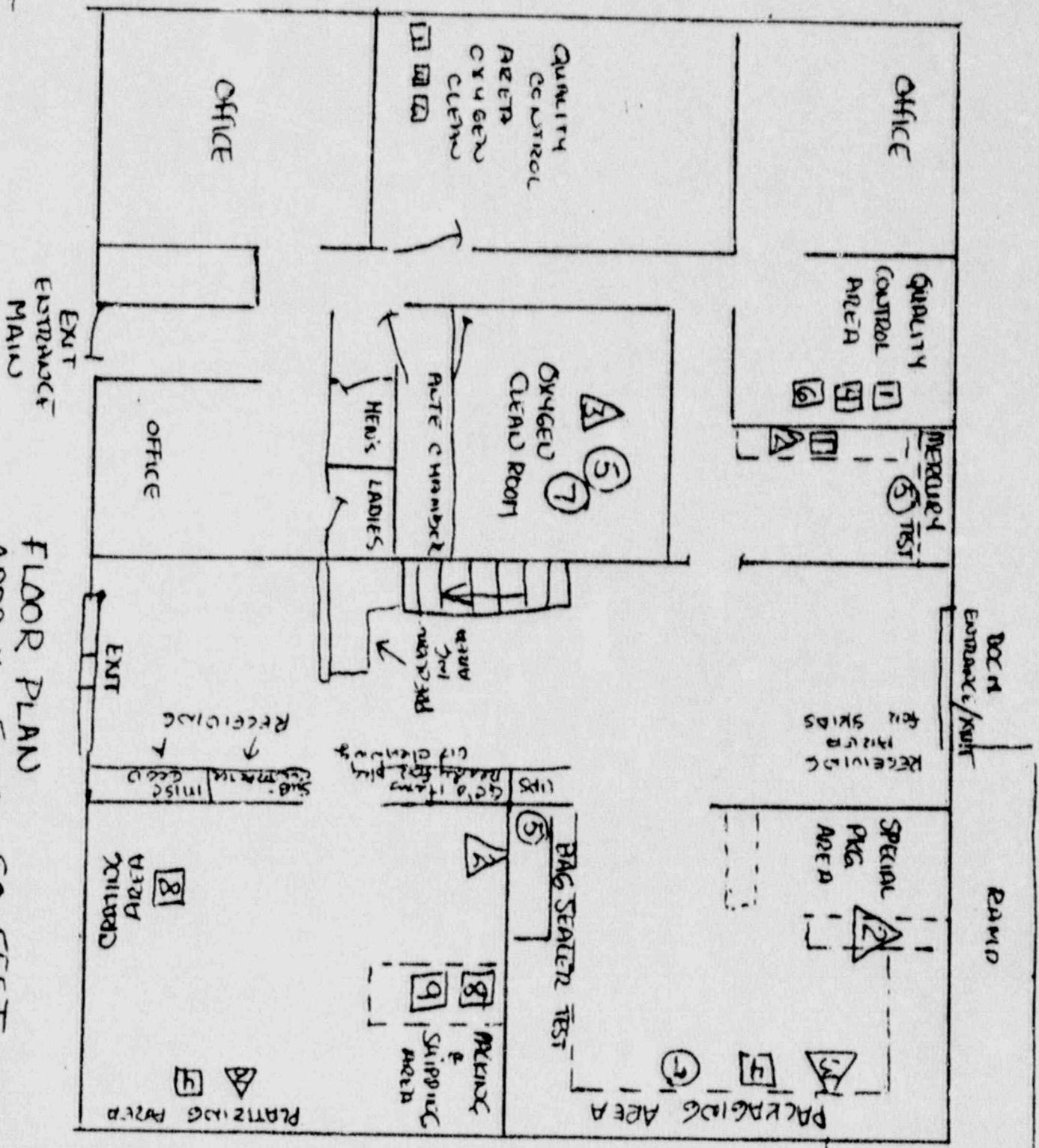
1. Gammon Technical Products
Manasquan, N.J.
2. Technical Products & Precision Engineering Co.
Hatfield, Pa. 19440
3. Amplex Corp
Bloomfield, CT.
4. DBR Industries, Inc.
Newtown, Pa.
5. JAN Packaging Co.
Dover, N.J.
6. J.A. MOODY Co.
Malvern, Pa.
7. A.C.T. INC,
Elizabethtown, Pa.
8. Fluid Power Inc.
York, Pa,
9. Many additional small local gov't prime contractors.

In additon to Mil-Spec Packagin and Cratin, MISC INC has a NAVSEA SYSTEMS approved
Clean Room for Oxygen Use application.


Anne C. Kerrigan
President

SECTION # 16
FLOOR PLAN

P.O. BOX 3823
643 DUNKLE STREET HARRISBURG, PA 17105
(717) 232-4719

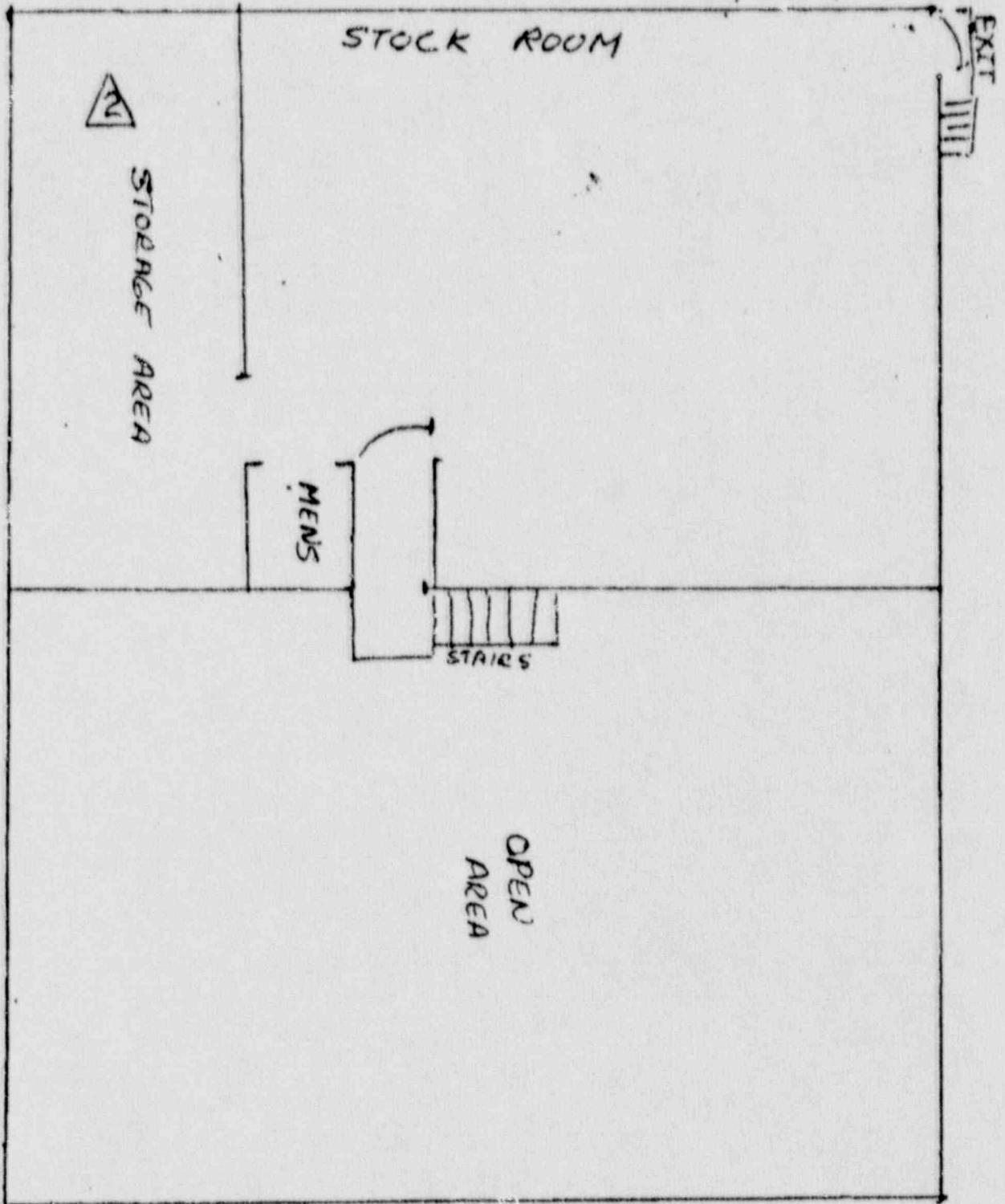


FLOOR PLAN
APPROX. 5000
SQ FEET
1st FLOOR - ST. LEVEL

SECTION 16
continued

MILITARY INDUSTRIAL SUPPLY COMPANY
643 DUNKLE STREET HARRISBURG, PA 17104
(717) 232-4719

FLOOR PLAN
2ND LEVEL



3

MISC INC
 P.O. BOX 3823
 643 DUNKLE STREET
 HARRISBURG, PA. 17105

QUALITY EVALUATION SURVEY

Company Name M.I.S.C., INC.

Principal Product or Services
MILITARY PACKAGING;
OXYGEN CLEANING TO MIL-SPEC'S.

Address P.O. BOX 3823
643 DUNKLE ST.
HARRISBURG, PA 17104

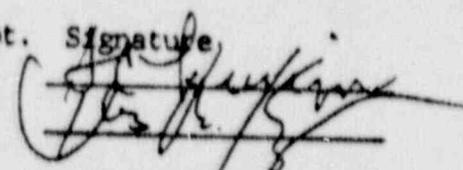
Phone No. 717 232 4719 FAX 717 232 4722

YES Small Business Concern YES Woman-Owned and operated Concern
NO Small Business Concern Owned and Controlled by Minority or Disadvantaged Individuals

Company Management Personnel:

Name	<u>ANNE C. KERRIGAN</u>	Position	<u>PRESIDENT</u>
	<u>THOMAS M. KERRIGAN</u>		<u>PLANT MANAGER</u>

Participants in Survey:

Name	Title	Organization/Dept.	Signature
<u>ANNE C. KERRIGAN</u>	<u>PRESIDENT</u>	<u>ALL</u>	
<u>THOMAS M. KERRIGAN</u>	<u>PLANT MANAGER</u>	<u>ALL</u>	

1. Attach a facilities list, including inspection and test equipment, to this report. Include a list of special processes performed at your plant and state if these processes have been certified, listing the applicable specification and certifying agency. Answer all questions that pertain to your company's service.
2. Total No. of Employees 7 No. of Quality Control employees 2
 No. of employees in Mfg. 4 No. of Admin. employees 2
3. Who is responsible for Quality Control and Inspection?
 Name T.M. KERRIGAN Title PLNT MNGR
 Reporting to A.C. KERRIGAN Title PRESIDENT
4. Do you have a Quality Control Manual or other type of written procedure describing
 Yes No

18. Do you conduct a final inspection? Yes No If so, describe your system. ADOPTED SYSTEM FROM, BUT NOT EXCLUDING THE USE OF, MIL-I-45208A.
- Who performs final inspection? THOMAS M. KERRIGAN, PLANT MANAGER.
19. Are parts identified to indicate final inspection? Yes No If so by what means? CONTROLLED STAMP / INITIALS OF QC.
20. Are records of final acceptance maintained? Yes No For how long? FIVE YEARS
21. Are inspection gages, measuring devices, and test equipment periodically inspected and recalibrated at established intervals? Yes No
22. Are records of calibration kept on file? Yes No
23. Is inspection equipment labeled according to calibration date? Yes No
24. Are employee-owned gages, etc. used for inspection? Yes No
25. Is the calibration of your gages and inspection or test equipment traceable to the National Bureau of Standards? Yes No
26. When were your master gage blocks or test equipment last certified? 7/88.
27. How do you identify and segregate non-conforming material? ITEMS PHYSICALLY ID'd, SEPARATE "REJECTION" STATUS AREA w/ WARNING/STATUS LABELS; REMOVAL BY AUTHORIZATION ONLY.
28. Do you have a corrective action program covering both purchased and manufactured non-conforming materials and parts? Yes No
29. Do you have a drawing and drawing revision control system? Yes No
If yes, describe the system and responsible personnel UNDER T.M. KERRIGAN DWG & DWG REV. CONTROLLED AGAINST CONTRACTUAL REQUIREMENTS/CUSTOMER SPECS. MILITARY STANDARDS UPDATED QUARTERLY BY PRIVATE INDUSTRY (NATIONAL STANDARDS ASSOC.)
30. Do you have facilities to do specialized packaging? CLEAN ROOM -FED-STD 209; SET-UP FOR PROCESSING UNDER MIL-STD-1330 & MIL-C-52211.
31. Would you permit a survey of your plant by an authorized representative of MISC INC? Yes No
32. Do you have metric manufacturing and inspection capabilities? Yes No
33. Do you have an environmentally controlled area for inspection, assembly, cleaning, testing, etc., if required? Yes No If yes, describe. INSPECTION ROOM-AIR COND. STD CONDITIONS. CLEAN ROOM-CLASS 100,000 IAW FED-STD-209.
- How long have you had with the type of ^{service} product to be supplied? 4.5 YEARS MIL

Application for a License to the Nuclear Regulatory Commission
for the Transfer of Watches Containing Tritium
by Marathon Watch Company Ltd.

PART 32: answers to sections pertinent to application

32.22

(a)(1) Marathon Watch Company Ltd. is applying for a license to transfer watches containing tritium.

- (2)(i) These products are described as:
- 1) Wrist Watch, Navigational, model # 211
 - 2) Wrist Watch, General Purpose
 - i) Mechanical wristwatch model # 348
 - ii) Quartz wristwatch, model # 350
- to be used for U.S. Department of Defense and General Service administration. Watches are designed as per U.S. Department of Defence specifications, which we have already sent you.
- (ii) The type of byproduct material in each unit is phosphor with hydrogen isotope tritium, in gaseous form. Tritium ISO 8 is used. There are 3 millicuries per each watch used. One gram equals 400 millicuries, and with one gram we can set tritium on 150 watches.
- (iii) Chemical form of the byproduct material is tritium. The useful life of product is 5-10 years; no changes in chemical or physical form will occur during the useful life of the product. Physical form is as in (ii).
- (iv) The tritium will be encased in glass vials, therefore there will be no solubility in water and bodily fluids.
- (v) Please note that we have already sent copies of specifications outlining construction of the watches.
- (vi) Maximum external radiation levels at 5 and 25 cm are both measured as 0 (none) as measured by geiger counter.
- (vii) The degree of access to human beings to the product during normal handling and use is that the watch will be worn on the wrist.
- (viii) The total quantity of byproduct material expected to be distributed in the product annually is approximately 150,000 millicuries. This is an estimate based on 50,000 watches; depending on contracts obtained from government sources only.

- (ix) The expected useful life of the product (watch) is 5-10 years.
- (x) The proposed method of marking each unit with appropriate identification is outlined in the watch specifications. Markings will be engraved on the back of each watch.
- (xi) Procedures for prototype testing of the product to demonstrate the effectiveness of the containment, shielding, and other safety features under both normal and severe conditions of handling, storage, use, and disposal of the product will be under Radiological quality assurance
- (xii, xiii, and xiv) Results of prototype testing, estimated radiation doses and dose commitments relevant to safety criteria in 32.23 and a determination that the probabilities with respect to the doses referred to in 32.23(d) meet that criteria are met by Marathon by adherence to:
- 1) Wrist watch, Navigation
MIL SA-ALC/MMI PD-496 (Revision B, 26FEB85)
 - 2) General Purpose wrist watch
MIL-W-46374E (31MAY89)
- These military specifications outline procedures for Conformance Inspection, Radiological, re MIL-STD-105. The manufacturer does testing for vibration and immersion. The watch and the vials will resist to immersion up to 3 ATUS, 90 feet. The watch and the vials will resist to 90 minutes vibration of harmonic motion having an amplitude of 0.03 inches (0.06 inch maximum total excursion). DCAS of Frankfurt, West Germany will be monitoring the production as well as quality and safety procedures.
(see appendix A)
- (xv) Quality control procedures to be followed in the fabrication of production lots and quality control standards will be set by MIL-W-46374E and MILSA-ALC/MMIPD-496.
- (xvi) Any additional information, including experimental studies and tests, required by the Commission will be given as required.

32.23

- (a) The watches are designed and manufactured in accordance to specifications that contain MIL-STD-105 and therefore will not exceed the dose to the appropriate organ as specified in Column I of the table in 32.24 of this part.
- (b) In normal handling and storage of the watch, the completed product will be further military packaged by personnel at a military packing house. The dose will not exceed as per table of organ doses in column II of the table in 32.24.
- (c) It is unlikely that there will be a significant reduction in the effectiveness of the containment, shielding, or other safety features of the product from wear and abuse likely to occur in normal handling and use of the product during its useful life. Watches will be tested and manufactured as specified under MIL-W-46374E and MILSA-ALC/MMIPD-496.
- (d) In use and disposal of a single unit, or in handling and storage of the quantities of exempt units likely to accumulate in one location during marketing, distribution, installation, and servicing of the product, the probability is low that the containment, shielding, or other safety features of the product would fail under such circumstances that a person would receive an external radiation dose or commitment in excess of the dose to the appropriate organ as specified in Column III of the table in 32.24, and the probability is negligible that a person would receive an external radiation dose commitment in excess of the dose to the appropriate organ as specified in Column IV, of the table in 32.24.
*please note that we will elaborate on this point by an additional letter shortly.



DEPARTMENT OF THE ARMY
UNITED STATES ARMY CONTRACTING COMMAND, EUROPE
USAREUR CONTRACTING CENTER
ESCHERSHEIMER LANDSTRASSE 163 6000 FRANKFURT/MAIN 1



REPLY TO
ATTENTION OF

United States Army Contracting Center, Europe

Address from the USA:

Address from Europe:

US ARMY CONTRACTING COMMAND EUROPE
USAREUR CONTRACTING CENTER (USAREURCC)
ATTN: AEUCC-C-CWF (Name) *THOMAS BREUER, OIC*
BOX 49
APO N.Y. 09710-5345

US ARMY CONTRACTING COMMAND EUROPE
USAREUR CONTRACTING CENTER (USAREURCC)
ESCHERSHEIMER LANDSTRASSE 163
6000 FRANKFURT/MAIN
WEST GERMANY
ATTN: (Name)

Telephone Numbers:

civilian

military

(Germany) 69 558298
69 1517255
69 1515217

3207255
3205217

TELEX: 412493

FAX: (civ) 069 151 8634

(mil) 320 7634