

M. Flom Associates, Inc. - Global Compliance Center

3356 North San Marcos Place, Suite 107, Chandler, Arizona 85225-7176 www.mflom.com general@mflom.com (480) 926-3100, FAX: 926-3598

Date: September 26, 2002

Applicant: Telex Communications, Inc.

8601 E. Cornhusker Highway

P.O. Box 5579

Lincoln, NE 68505-5579

Attention of: Charles E. Conner, Project Engineer

(402) 467-5321; FAX: -3279

E-mail: charlie.conner@telex.com

Equipment: TR-825 FCC ID: B5DM517 P.O. Number: 263372

FCC Rules: Radiofrequency Radiation Exposure Limits

47 CFR 1.1310

MPE - Mobiles x Fixed Based Station

Gentlemen:

Enclosed please find your copy of the MPE Calculation, the whole for Environmental Assessment (MPE) of the referenced equipment as shown.

Please allow from 8-12 weeks to hear from the Commission, who may request additional data or information, and even a sample for pre-grant audit testing.

Should you need any clarification, just fax or phone. Thank you again for this order - it has been a pleasure to be of service.

Sincerely yours,

Morton Flom, P. Eng.

enclosure(s)
MF/cva

MFA

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Date: September 26, 2002

Federal Communications Commission

Via: Electronic Filing

Attention: Authorization & Evaluation Division

Applicant: Telex Communications, Inc.

Equipment: TR-825 FCC ID: B5DM517

FCC Rules: Radiofrequency Radiation Exposure Limits

47 CFR 1.1310

MPE - Mobiles x Fixed Based Station

Gentlemen:

On behalf of the Applicant, enclosed please find the MPE Calculation, the whole for Environmental Assessment (MPE) of the referenced equipment as shown.

We trust the same is in order. Should you need any further information, kindly contact the writer who is authorized to act as agent.

Sincerely yours,

Morton Flom, P. Eng.

enclosure(s)
cc: Applicant
MF/cva

FCC ID: B5DM517

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ENVIRONMENTAL ASSESSMENT

for

MOBILES/FIXED BASE STATION

for

FCC ID: FCC ID: B5DM517 Model:TR-825

to

FEDERAL COMMUNICATIONS COMMISSION

47 CFR 1.1310 (MPE)
Radiofrequency Radiation Exposure Limits

DATE OF REPORT: September 26, 2002

ON THE BEHALF OF THE APPLICANT:

Telex Communications, Inc.

AT THE REQUEST OF:

P.O. 263372

Telex Communications, Inc. 8601 E. Cornhusker Highway

P.O. Box 5579

Lincoln, NE 68505-5579

Attention of:

Charles E. Conner, Project Engineer

(402) 467-5321; FAX: -3279

E-mail: charlie.conner@telex.com

SUPERVISED BY:

Morton Flom, P. Eng.

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Required information per ISO/IEC Guide 25-1990, paragraph 13.2:

a) TEST REPORT (SUPPLEMENTAL)

b) Laboratory: M. Flom Associates, Inc.

(FCC: 31040/SIT) 3356 N. San Marcos Place, Suite 107

(Canada: IC 2044) Chandler, AZ 85225

c) Report Number: d0290084

d) Client: Telex Communications, Inc.

8601 E. Cornhusker Highway

P.O. Box 5579

Lincoln, NE 68505-5579

e) Identification: TR-825

FCC ID: B5DM517

Description: Beltpack Transceiver

f) EUT Condition: Not required unless specified in individual

tests.

g) Report Date: September 26, 2002 EUT Received: September 16, 2002

h, j, k): As indicated in individual tests.

i) Sampling method: No sampling procedure used.

1) Uncertainty: In accordance with MFA internal quality manual.

m) Supervised by:

Morton Flom, P. Eng.

M. Jul P. Ery

n) Results: The results presented in this report relate

only to the item tested.

o) Reproduction: This report must not be reproduced, except in

full, without written permission from this

laboratory.

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IDENTIFICATION OF THE EQUIPMENT UNDER TEST (EUT)

NAME AND ADDRESS OF APPLICANT:

Telex Communications, Inc. 8601 E. Cornhusker Highway P.O. Box 5579 Lincoln, NE 68505-5579

MANUFACTURER:

Telex Communications, Inc.

FCC ID: B5DM517 MODEL NO: TR-825 DESCRIPTION: Non Broadcast TYPE OF EMISSION: 74K0F3E FREQUENCY RANGE, MHz: 470 to 608 614 to 746 0.05 POWER RATING, Watts: Switchable Variable x N/A _ AMPS MODULATION: ___ TDMA CDMA x OTHER

NOTE: For RF Safety test antenna gain taken at the upper range of expected gain (i.e. 0 dBd) and RF Power set to highest nominal power across all channels.

HELICAL
MONOPOLE
WHIP
X OTHER

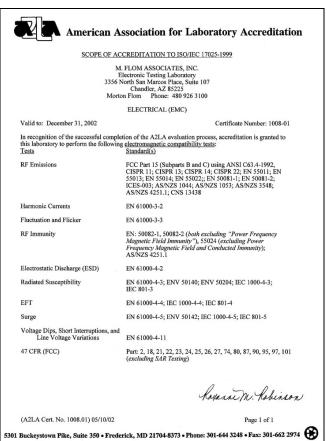
ANTENNA:

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M. Flom Associates, Inc. is accredited by the American Association for Laboratory Association (A2LA) as shown in the scope below.





"This laboratory is accredited by the American Association for Laboratory Accreditation (A2LA) and the results shown in this report have been determined in accordance with the laboratory's terms of accreditation unless stated otherwise in the report."

Should this report contain any data for tests for which we are not accredited, or which have been undertaken by a subcontractor that is not A2LA accredited, such data would not covered by this laboratory's A2LA accreditation.

PAGE NO. 4 of 5.

STANDARD TEST CONDITIONS and ENGINEERING PRACTICES

Except as noted herein, the following conditions and procedures were observed during the testing:

In accordance with ANSI C63.4-1992/2000, section 6.1.9, and unless otherwise indicated in the specific measurement results, the ambient temperature of the actual EUT was maintained within the range of 10° to 40° C (50° to 104° F) unless the particular equipment requirements specify testing over a different temperature range. Also, unless otherwise indicated, the humidity levels were in the range of 10% to 90% relative humidity.

Prior to testing, the EUT was tuned up in accordance with the manufacturer's alignment procedures. All external gain controls were maintained at the position of maximum and/or optimum gain throughout the testing.

Measurement results, unless otherwise noted, are worst case measurements.

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Name of test: Environmental Assessment

Specification: FCC: 47 CFR 1.1310

Measurement Guide: ANSI/IEEE C95.1 1992

CALCULATED MINIMUM SAFE DISTANCE

 $Rm = [P/(4\pi \times Lim)]^{1/2}$

 $Lim \ mw/cm^2 = f/1500 = 470/1500 = 313.3 \ mw/c \ m^2$

Rm = 0.00356 meters

Rm = 0.356 cm

SUPERVISED BY:

Morton Flom, P. Eng.

M. There P. Eng

(The following will be placed in the Instruction Manual)

MANDATORY SAFETY INSTRUCTIONS TO INSTALLERS & USERS

Use only manufacturer or dealer supplied antenna.

Antenna Minimum Safe Distance: 0.356 cm.

Antenna Gain: zero dBd referenced to a dipole.

The Federal Communications Commission has adopted a safety standard for human exposure to RF (Radio Frequency) energy which is below the OSHA (Occupational Safety and Health Act) limits.

Antenna Mounting: The antenna supplied by the manufacturer or radio dealer must not be mounted at a location such that during radio transmission, any person or persons can come closer than the above indicated minimum safe distance to the antenna i.e.0.356 cm.

To comply with current FCC RF Exposure limits, the antenna must be installed at or exceeding the minimum safe distance shown above, and in accordance with the requirements of the antenna manufacturer or supplier.

Base Station Installation: The antenna should be fixed-mounted on an outdoor permanent structure. RF Exposure compliance must be addressed at the time of installation.

Antenna Substitution: Do not substitute any antenna for the one supplied or recommended by the manufacturer or radio dealer. You may be exposing person or persons to excess radio frequency radiation. You may contact your radio dealer or the manufacturer for further instructions.

<u>WARNING:</u> Maintain a separation distance from the antenna to a person(s) of at least 0.356 cm.

You, as the qualified end-user of this radio device must control the exposure conditions of bystanders to ensure the minimum separation distance (above) is maintained between the antenna and nearby persons for satisfying RF Exposure compliance. The operation of this transmitter must satisfy the requirements of Occupational/Controlled Exposure Environment, for work-related use. Transmit only when person(s) are at least the minimum distance from the properly installed, externally mounted antenna.

TESTIMONIAL AND STATEMENT OF CERTIFICATION

THIS IS TO CERTIFY THAT:

- 1. THAT the application was prepared either by, or under the direct supervision of, the undersigned.
- 2. THAT the technical data supplied with the application was taken under my direction and supervision.
- 3. THAT the data was obtained on representative units, randomly selected.
- 4. THAT, to the best of my knowledge and belief, the facts set forth in the application and accompanying technical data are true and correct.

CERTIFYING ENGINEER:

Morton Flom, P. Eng.