January 11, 1980

TO: Al Secor
    Jeff Rochlis
    Ed Krakauer

FROM: Dave Chandler

SUBJECT: PARTICIPATION IN PRESTEL INTERNATIONAL MARKET TRIAL

As is indicated in the attached documents, Mattel has been invited to participate in a market trial of the Prestel International sponsored by the British Post Office and administered by Logica. This is a rather limited trial, with some ten companies supplying data and some twenty companies as users of that data. We have also been invited to attend the first forum of the participants, provided we express our intent to become participants in the program.

The costs associated with participating in the one year long trial are tabulated below. These numbers assume that by the time we would have a terminal installed the Prestel International Operation would have United States switching network in place, which they expect to have by the end of this month. You will note that the largest cost element has to do with the usage that we make of the terminal which could vary either direction, depending on how significant we may find that portion of the operation.

It is my recommendation that we sign and send the letter of intent to participate with the intention of having one terminal installed here at Hawthorne. A single terminal is acceptable to them, even though in their letter they suggest two - one here, and perhaps one in England. It would be possible, if we should elect to do so, to have a terminal installed at Dixon's or perhaps some other place in England, and among other things, use it for transmission of business information. Assuming we proceed with this I would propose to attend this first forum in London, which meets the 22nd and 23rd of this month. The advantages of participating are several. We would get the opportunity to be involved in early discussions and be aware of the direction that Viewdata is going on an international basis. We would also have a functioning operation with which we could be learning the details of a Viewdata operation as it would relate to configuring a modem for Intellivision to be used in such a configuration. I would think that we would want to, as early as practical, configure one of our Intellivisions as the terminal and perhaps relinquish the Prestel terminal at that time.

DPC/lw
Dr D P Chandler
Director of Engineering
Mattell Electronics
5150 Rosecrans Ave
Hawthorne
California 90250
USA

Dear Mr Chandler

As promised when we spoke on Tuesday of this week I am writing to confirm our talks particularly in three areas.

1. The Prestel International market trial
2. The progress of the market trial
3. An invitation to Mattell Electronics to participate in the market trial as a user of the general information database.

1. The Prestel International market trial

As you are aware Logica is acting as consultant to the British Post Office in organising an international market trial of the Prestel Viewdata system. During the year of the trial we have asked approximately twenty prestigious international corporations to participate as users of the system. These users will also have the facility of being able to have a part of the database for their own personal use by renting frames on the system and setting up a Private Closed User Group. The enclosed Marketing Sheets should update you fully on what the Prestel International market trial is all about and give you the background to Prestel International.

2. Progress of the Market Trial

We are bringing together a small number (say 12) of information providers and approximately twenty prestigious international organisations as users. To date progress has been excellent. The list of invitees is one which was drawn up long ago and one which we must adhere to. Consequently in the first stages it is not possible to invite Mattell Electronics to participate with a Private Closed User Group.
During the trial there will be another category of participant: one that merely makes use of the general information database. The database will obviously be quite small in the early days but the intention is that it will grow in size and scope in line with the influence of the participants. It is this latter category of user, that of a General Information (GI) user that we envisage as the role of Mattell Electronics, particularly in the first few months.

3. An Invitation to Mattell Electronics

Please accept this letter as a formal invitation to Mattell to participate in the trial as a GI user. In extending this invitation we are aware that Mattell will, if they decide to participate, be doing so in order to gain knowledge of, and involvement in progress in the integration of world databases, in home computer systems, home computing etc. etc.

Recommendations

May I please make the following recommendations.

- Please have signed and return the enclosed Letter of Intent signifying your intention to participate in the Prestel International market trial.

- That Mattell request the installation of two TV terminals, one in one of your European sites say in London and one in Los Angeles in order to access the GI database. The cost of these will be approximately £40/£60 per month per terminal and would be subject to a normal TV rental agreement between yourselves and the terminal supplier. If you agree to this suggestion please complete the attached forms giving details in respect of each terminal location. The request for installation enables us to schedule delivery.

- A separate letter is attached giving information relative to a meeting of participants which is due to take place in London on January 22/23 1980. If you agree to participate please arrange to let me have the names and job titles of those attending to enable us to forward the official invitations from the British Post Office. Many senior people from the various participant organisations worldwide will be attending and may I respectfully suggest therefore, that you treat this workshop as an important calendar date. The Tuesday evening dinner/buffet is a particularly important function as it will enable participants to meet in a less formal atmosphere.

In conclusion may I thank you for giving us the opportunity to write to you. We would welcome Mattell as a GI database user of the Prestel International system. I am sure that your
company corporately and you personally, can play a major role along with the small but prestigious group of international organisations who are participating in the trial.

Please be in touch as soon as possible.

Yours sincerely

[Signature]

Allan Hewitt
LETTER OF INTENT

TO: LOGICA LIMITED
64 Newman Street
London W1

Dear Sir

It is our intention to participate in the market trial of Prestel International, being organised by Logica Limited on behalf of the British Post Office.

We recognise that at some future date we will need to enter into a rental agreement for terminal equipment with a terminal supplier and also an agreement with the British Post Office on the services to be offered to us by them.

Until such agreements are signed, this letter will serve as confirmation of our willingness to be a participant in the Prestel International service.

For and on behalf of

........................................
........................................
........................................
........................................
TERMINAL INSTALLATION DETAILS

COUNTRY   TOWN

NAME OF USER

LOCATION

CONTACT NAME
AND POSITION

CONTACT TEL.NO

TYPE OF SET

READY FOR
SERVICE DATE

BILLING ADDRESS
Dr D P Chandler
Director of Engineering
Mattel Electronics
5150 Rosecrans Ave
Hawthorne
California 90250
USA

PRESTEL INTERNATIONAL

A meeting of all the participants in the Prestel International Market Trial will take place in London in January 1980. Details of the meeting are given below.

Objectives

To facilitate an exchange of information between the participants and to update the participants on the current status of the market trial, the database, the terminal supply situation, and activity taking place with the various PTTs within the market trial countries.

The Date and Venue

Date                Tues/Weds  22/23 January 1980
Time
Tuesday           9.30 am - 5.30 pm
Wednesday     9.30 am - Lunch

Venue - Waldorf Hotel, Aldwych, London.

The Attendees

We anticipate that at least two people will represent each of the participants organisations and therefore the meeting will be made up of approximately 100 people representing the information providers, the users, the terminal suppliers, syndicated users, and the British Post Office.

The Agenda

At this stage the agenda for the meeting has not been finalised. However, it is intended that it will cover the following topics.
- Background to PI
- The Information Providers - the what and the how
- Panel discussion and presentations by selected Information Providers
- Development of a Private Closed User Group
- Development of a Syndicated Closed User Group
- Panel discussion and presentations by selected users
- The Terminal Providers
- The PTTs
- The need for User Group(s)

**Note**

Prestel sets will be available in the hotel for Users and Information Providers, to give them the opportunity to privately demonstrate their PCUGs and Information databases if they so wish.

**Accommodation**

It is anticipated that several participants attending will require hotel accommodation on the night of Tuesday 22nd January and we envisage at least half of the attendees staying the night. Accommodation will be arranged and the cost of a single room will be approximately £40 payable by the individual.

**Catering Arrangements**

**Tuesday 22nd January**

- Evening is Buffet Dinner when it is hoped that additional guests may be present. It is intended that this occasion will give participants an informal opportunity to meet and exchange views and you are encouraged to treat the evening as a very important part of the meeting.

**Wednesday 23rd January**

- Buffet Lunch will be served 12.30 pm onwards and the meeting will disperse.
Please let me know as soon as possible the names of those persons from your organisation who will be attending so that official invitations from the British Post Office can be forwarded. Please also let me know whether or not the attendees from your organisations will require overnight accommodation on Tuesday 22nd January.

Your early response would be appreciated.

Yours sincerely

[Signature]

A Hewitt
PRESTEL INTERNATIONAL MARKET TRIAL

PRESTEL INTERNATIONAL

Information is one of the prime resources of modern business. Efficient access to relevant and up-to-date information is becoming increasingly vital to many organisations, particularly to those with international interests. Prestel International has been conceived to meet the information needs of international organisations and their executives. It will make a central databank of business information from many countries available worldwide.

The Prestel International service will be based on Prestel technology, which is essentially a simple but efficient combination of telephone, television and computer technology. Pressing the keys of the Prestel desk top terminal calls up any of the thousands of information frames available to be displayed in full colour on the screen. The information frames are provided by publishers and other organisations who are experts in providing authoritative top-quality information to business, government and the professions. Prestel International can also be used by individual organisations to disseminate private internal information to their offices throughout the world, giving immediate access to the latest available information.

In order to assess the feasibility and viability of a Prestel International service, the British Post Office is conducting a market trial to run during 1980. Logica, a leading communications and computer consultancy, has been commissioned by the British Post Office to establish the arrangements for the operation of the market trial.
PRESTEL INTERNATIONAL MARKET TRIAL

THE MARKET TRIAL

A market trial of the Prestel International service will be conducted throughout 1980 to determine whether such an international business information service is feasible and viable. The market trial will be limited in scale, so that efforts can be concentrated on providing a top-quality service and so that a proper evaluation can be carried out.

A small number of international organisations, representing both business and government, are being invited to participate as users of the trial service. The information in the databank will be provided by a few invited organisations who will offer a range of both general and specialist information relevant to international businesses and professional people.

During the market trial the Prestel International service will be supported in seven countries:

- Australia
- The Federal Republic of Germany
- The Netherlands
- Sweden
- Switzerland
- The United Kingdom
- The United States of America

The market trial will give users and information providers in these countries the opportunity to assess the impact that an international Prestel service will have. The British Post Office will be monitoring the market trial and are expected to decide on the future of Prestel International before the end of the trial period.
PRESTEL INTERNATIONAL MARKET TRIAL

FACILITIES

Users contact Prestel International from a Prestel terminal which is like a small television set equipped with an alphanumeric keyboard. The Prestel terminal is linked to the Prestel International computer via the telephone network. All the user needs to do to access Prestel International is to make a telephone call and to log in.

Once the user is connected to the service, information is easy to find, thanks to the comprehensive indexing system developed by the British Post Office. Information is organised in 'frames', a frame being simply the contents of one screen. There are information frames and indexing frames. The latter direct the user to the information frames in which he is interested. Every indexing frame presents the user with a choice of topics. Next to every topic listed, a number appears on the screen which, when tapped on his keyboard, leads him to the topic area selected. If a user already knows the information frame he wishes to look up, he can key in the appropriate number directly, without needing to go through the indexing frames.

Information frames are attractively displayed on the screen. Information providers who set up the frames take special care to present their information in an unambiguous and helpful style. The use of colour further adds to clarity, as do letters of different sizes, graphics and diagrams.

Information providers can up-date their information at any time from an editing terminal or by bulk up-date from another computer. There are no printing or distribution delays. Thus users always have the latest information available. Overall Prestel International makes disseminating information more efficient for the information provider and obtaining the information faster and easier for the user.

The Prestel International computer can restrict the retrieval of certain information frames to nominated users. This facility, called a Closed User Group (CUG), allows users to disseminate company internal information to overseas subsidiaries and branches. It is also used by providers of specialised information who prefer to supply their information to a restricted number of users on a subscription basis.

Prestel International offers a reply service by making use of special response frames prepared by information providers. Users can type responses using their keyboards. This facility can be used for a variety of purposes such as replying to questionnaires, ordering goods and services, or making reservations. Once completed and sent, the response frames are stored in the computer until recalled by the information provider who owns the frame.
PUBLIC INFORMATION

Whatever their precise line of business, most organisations regularly need certain types of information related to their everyday business activities. To fulfill these information requirements of company executives, their support staff and some specialist services, Prestel International will offer a comprehensive public databank. Subject areas in the databank will be especially designed and developed to suit the finance, marketing, travel, distribution and personnel executives and their departments. A large part of the information will of course be of interest to all types of user.

Here is a sample of the topic areas intended to be covered by the public databank and how they relate to the selected functional areas that exist in most organisations:

<table>
<thead>
<tr>
<th>Functional Area of Organisation</th>
<th>Topic Area of Databank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>exchange rates, money markets, stock markets, commodity prices, company results, taxation</td>
</tr>
<tr>
<td>Marketing</td>
<td>international and national trade statistics, commercial attaches, exhibitions, advertising, research papers</td>
</tr>
<tr>
<td>Travel</td>
<td>timetables, fares, hotels and restaurants, traveller's cheque rates, traveller's briefing, entertainment and sport directories</td>
</tr>
<tr>
<td>Distribution</td>
<td>timetables, journey distances and times, weather and road conditions, customs regulations, directories</td>
</tr>
<tr>
<td>Personnel</td>
<td>cost of living statistics, living abroad, data, regulations, conferences and courses</td>
</tr>
<tr>
<td>General</td>
<td>international news and weather, demonstrations, games and amusements</td>
</tr>
</tbody>
</table>

The information, provided by well known publishers and other organisations specialising in information provision, will be regularly updated and comprehensively indexed. Users will know that at all times they have reliable up-to-date information literally at their fingertips.
The Prestel terminal is a small modified colour television receiver equipped with a keyboard. It is fitted with a decoder, a micro-processor which communicates with the Prestel International computer and generates the information displays. The use of television technology enables the display to be created using six primary colours as well as white, so that information can be attractively and clearly presented. For example, frames can be created with coloured background and important details can be highlighted by colour changes or flashing. Double or triple sized characters can be used for titles. Histograms and diagrams can be built using the 64 Prestel graphics characters. A screen will accommodate twenty four lines of forty characters.

There are three types of keyboard available. The first is a simple numeric keypad which is all that is required for retrieving information from Prestel International. Most Prestel International terminals will have an alpha-numeric keypad which will allow more flexible input to response frames. Finally there is the editing keyboard, used for creating frames for the database. In addition to the standard alpha-numeric keys, it has keys for controlling colour and character size and keys for creating graphics. These keyboards are used by information providers and PCUG owners.

Hard copy printers are becoming available which will enable the contents of a screen to be transferred to paper for subsequent reference. These will be an optional extra which can be plugged into the terminal.

For the Prestel International market trial, Prestel terminals will be supplied by a recognised television supplier in each country who will be responsible for their maintenance. Outside the UK, Prestel terminals will require an external modem to connect them to the telephone network.

If an organisation is already using terminals compatible with Prestel International, connection of these terminals to the Prestel International system may be permitted.
PRESTEL INTERNATIONAL MARKET TRIAL

OPERATIONS

The Prestel International service is provided by the British Post Office in London on a GEC 4000 series computer. The service will be available for 22 hours per day, six days per week. During the close down period, which will be scheduled for two hours between 0100 - 0500 GMT depending on time zone differences, the databank will be archived to safeguard against possible loss of data in the event of a subsequent system malfunction.

In the Prestel International computer centre, two complete GEC 4000 series computer configurations are installed for the market trial. The GEC computer is proven in continuous process control applications and total system failure will be very rare. On such occasions the standby computer system will be switched on and the service normally restored in less than thirty minutes.

During the market trial connections with Prestel International from Europe and Australia will be made via datel telephone calls directly dialled to the London Computer Centre. Connections from the United States will be via the RCA Globcom Low Speed Data Service and thence via the BPO International Packet Switched Service (IPSS). Data is transmitted from the Prestel International computer at 1200 bits per second and control information from user’s keyboards transferred back at 75 bits per second using a Start/Stop asynchronous protocol and an 1507 compatible character set.
PRESTEL INTERNATIONAL MARKET TRIAL

TERMS AND CONDITIONS

1. Contracts to participate in the Prestel International market trial will be made under English Law between the customer and the British Post Office.

2. The British Post Office will provide the Prestel International market trial service.

3. For the duration of the market trial only, the British Post Office will in some cases rebate a proportion of the telecommunications cost incurred during the Prestel connect time.

4. The prices quoted do not include UK Value Added Tax or any other relevant local taxes. To the extent that the services provided are subject to these taxes, the prices will be increased by the gross amount of these taxes.

5. Invoices will be submitted every quarter. Where appropriate, rebates will be issued with the quarterly statement.

6. In addition to the Prestel International charges incurred, the invoice will also include frame retrieval charges. These will be collected by the British Post Office on behalf of the information providers.

7. The prices quoted in the attached schedule apply only to the Prestel International market trial until December 1980 and in no way indicate the level of charges that might be levied in any subsequent Prestel International service.
PRESTEL INTERNATIONAL MARKET TRIAL

SCHEDULE OF CHARGES

The prices quoted are standardised in Prestel Resource Units (PRU). Accounts will be invoiced in local currency at an appropriate PRU exchange rate, set one quarter in advance. One PRU is currently equivalent to 1p sterling.

Prestel International Market Trial Charges

<table>
<thead>
<tr>
<th>Entry Fees</th>
<th>Waived</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standing Charges</td>
<td></td>
</tr>
<tr>
<td>Annual service charge</td>
<td>Waived</td>
</tr>
<tr>
<td>Rental of CUG</td>
<td>Waived</td>
</tr>
<tr>
<td>Rental of database space</td>
<td>25 PRU per frame per quarter</td>
</tr>
<tr>
<td>Usage Charges</td>
<td></td>
</tr>
<tr>
<td>Retrieval connect time</td>
<td>10 PRU per minute</td>
</tr>
<tr>
<td>Edit connect time</td>
<td>Waived</td>
</tr>
</tbody>
</table>

Telephone Charges

EUROPE - users will be charged full dial-up international datel telephone rates by their local telephone authority. A proportion of these will be rebated to the user through credits on Prestel International billing.

USA - users in the USA will be charged datel charges, with a rebate, until the establishment of an IPSS link.

AUSTRALIA - to be announced.

Local telephone authorities may impose an additional installation charge.

Terminals

The rental costs of retrieval terminals, edit terminals, modems and hard copy printers are subject to quotation by local suppliers. Current estimates of the rental costs of retrieval terminals are £40-£60 per month.

Frame Retrieval Charges

Users are charged the price in PRUs of retrieval of each Public Database frame, which is set by the information provider to reflect the value of the information.

Taxes

The above do not include local taxes, which will be billed as appropriate.

THIS SCHEDULE OF PRICES APPLIES ONLY TO THE PRESTEL INTERNATIONAL MARKET TRIAL. IT DOES NOT REFLECT THE PRICE STRUCTURE OR PRICE LEVELS OF ANY FULL PRESTEL INTERNATIONAL SERVICE THAT MIGHT FOLLOW THE MARKET TRIAL.
PRESTEL INTERNATIONAL MARKET TRIAL

SCHEDULE OF TELECOMMUNICATION TELEPHONE CHARGE REBATES

As part of the Prestel International Market Trial service, a rebate will be offered on calls to the Prestel International Market Trial computer. These rebates will be handled via Prestel International billing and will operate at the following rates per minute:

<table>
<thead>
<tr>
<th>Country</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Germany</td>
<td>0.40 DM</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.30 G</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.20 SK</td>
</tr>
<tr>
<td>Switzerland</td>
<td>0.05 SFr</td>
</tr>
<tr>
<td>UK</td>
<td>Nil</td>
</tr>
<tr>
<td>Australia</td>
<td>To-be-announced</td>
</tr>
<tr>
<td>USA</td>
<td>$1.00</td>
</tr>
</tbody>
</table>

Rebates are measured by connect time as measured by the Prestel International computer and will be reviewed at regular intervals.
January 28, 1980

TO:         Ed Krakauer  
            Jeff Rochlis  
            Al Secor  
            Chuck Rudd

FROM:       Dave Chandler

SUBJECT:    REPORT ON PRESTEL INTERNATIONAL FORUM

The Forum:

Approximately 100 people from 37 companies, in addition to Logica and the British Post Office, attended the Forum. It provided an opportunity for a good interchange among the people and general understanding of where the program is and where it is expected to be going.

Schedule:

The computers for Prestel International are not yet in place but they are expected to be in operation within a few weeks. Terminals suitable for use in the United States are two to three months away and how soon after that we will get ours is not clear; probably about a month. It will be a Sony terminal.

Prestel International:

The Prestel International market trial is being handled independently from the U.K. Prestel operation and is also being handled independently from the United States activities, which GTE is handling. This does not necessarily mean that in future operations there might not be more connection between them, or conceivably, they may be incorporated together. However, the problems associated with transfer of software from one country to another are such that linking of the national systems does not seem too likely, for a while at least. The Prestel International market trials are being managed for the British Post Office by Logica.
British Post Office:

I am particularly impressed with the aggressive way in which the British Post Office is pursuing the Prestel concept. Within the United Kingdom they, of course, have the full responsibility for it as a nationalized corporation. In the case of the Prestel International, however, they are operating as a separate competitive company - much as an independent corporation would do. They are investing significant amounts of money which are the result of the profits they have been making on their total British operations, not the Prestel, but the other communications and mail operations. It appears that their mail system is costing them money but their communications system is making them money.

Contacts:

Probably the most important contact I made at the Forum was with Richard Cummings who is the General Manager for International Operations of BARIC Computing Services, Ltd. Among other things, they have programmed a number of games on the U.K. Prestel system, and to the surprise of many people, these games are getting more activity than any of the other software on the system. They impress me as being a capable programming group, who could do effective Intellivision programming for us for the British market. They could be interested in doing programming for us if that meant that they could apply Intellivision to business applications in the U.K. As a next step, I have promised to send Mr. Cummings our Intellivision brochure and the technical description. They probably will contact us to set up a meeting if we are interested in pursuing this.

Prestel Codes - A Slight Problem:

I got from Logica a complete specification of the Prestel Communication Codes. The complete set includes display capabilities which are not reasonable for us to include in our Keyboard Component. Most of these are of little consequence in the U.S. market; perhaps of a little more concern for the European market. A few will require some compromises for some software - mostly in areas
that really are not compatible with N.T.S.C. T.V. presentation. Prestel
software can call for any of seven colors as background anywhere in the
presentation portion of the screen, with the alphanumerical or graphic characters
also codable in any of these seven colors. We have the seven colors, all right,
but at the high resolution most of the color combinations are not acceptable on
N.T.S.C. sets. As a result, we have configured Intellivision to write the
characters at a different luminence from the background color, but not a different
color. My present feeling is that we will, under software control, accept the
incoming codes, and we will have to decide whether to pick the color called for
the background color or the color called for the characters, and use that for
the background color for that area. Then the alphanumerical or graphic characters
will be superimposed on that background color as a different luminence color.
This will change the effect, particularly in the graphics areas, from what the
original software intended to have, but it will provide all the shapes of objects
that were intended, and I suspect will provide an acceptable presentation in
almost all - if not all - the cases. I will want to discuss this with GTE and
get their reactions as well. In addition to the building blocks for the crude
graphics that we knew about for the Viewdata systems, it turns out that they
also have a similar set of characters which are made up of spots instead of
blocks. We will have to see if we can get these worked into our character set
without creating other problems.

DPC/Iw
February 24, 1981

Dr. David P. Chadler
MATTEL ELECTRONICS
5150 Rosecrans Avenue
Hawthorne, CA 90250

Dear Dr. Chadler:

Picture Prestel, the videotex transmission of color photographs, is here and can be seen at the Information Utilities Conference '81 on March 2, 3, and 4 at the New York Hilton. You are cordially invited to come and visit us at booths 31 and 32 and view this latest addition to the Prestel system.

The Picture Prestel technology is expected to enhance the advertising potential for the videotex medium, as well as enabling users to view goods and services before buying.

Prextend, the dynamic display graphics capability of Prestel, will also be demonstrated at the conference.

We hope you will take this opportunity to view these two latest additions to the Prestel technology. We look forward to seeing you at the New York Hilton on March 2, 3 or 4.

Sincerely,

Adrian Noad
U.S. Manager
Prestel International
FOR: PRESTEL INTERNATIONAL

NEW YORK -- Prestel International, the two-way international business information videotex system, that connects a modified TV set with a computerized data base via telephone lines, will be demonstrating its latest technology -- Picture Prestel -- at the Information Utilities Conference in New York this week. Picture Prestel provides transmission of color photographs to enhance message content, increase the advertising potential of videotex and allow users to view goods and services before buying -- in much the same way that a mail order catalogue is currently used.

Prestel is the name given to the videotex system invented and pioneered by British Telecom, the telecommunications arm of the British Post Office. It is an interactive system, such that at the push of buttons on a keypad linked to a TV set, users can reserve hotel rooms in many countries, order market reports, or request constantly updated news from information providers in participating countries.

A market trial of Prestel International has been underway for the past year in the Netherlands, Switzerland, West Germany, the U.K., Sweden, Australia and the U.S., with 350 terminals on the service. Full service will be available for business subscribers in these countries, plus Hong Kong, within the next few months and will be launched in the U.S. in the Fall.

-more-
"We are actively looking for a company to market Prestel International in the U.S.," says Adrian Noad, U.S. Manager of Prestel International. "The current marketing effort will be directed at specific business users, such as those in the computer, shipping and commodities industries. Later we plan to widen our market."

In Britain, where Prestel has been available for business and residential use since September 1979, there are nearly 9,000 modified television sets registered on the Prestel system. About 80 percent of users are business subscribers, who have access to 200,000 "pages" of information, ranging from the latest commodities prices to travel timetables and computer games.

Each Prestel "page" consists of 24 lines of 40 characters each, or a combination of figures and simple diagrams in up to seven colors. Picture Prestel provides the additional capability of transmitting color photographs on the system.

Currently, the most popular use of Prestel is in the travel industry. This is followed by stock exchange and investment information and news plus classified advertising provided by many regional newspapers. The two-way interactive system allows users to order wine, for example, simply by inserting a credit card number.

Both within Britain and on the Prestel International service, American Express is an active information provider. Subscribers can get up-to-the-minute information on hotels, restaurants, entertainment and airlines around the world and make reservations through the system.

Most American Express "pages" are provided free of charge, because they increase business. Some information providers charge a small fee for access to information. Thus, a viewer would pay for a news update from The Wall Street Journal or an abstract of a recent market research study. The full study could subsequently be ordered through Prestel.
Other active users of the Prestel International service include "closed user groups", usually large companies that can restrict access to the information to company members who have the correct user number, plus a password and personal password, to ensure security. Shell and Unilever each rent space on the Prestel International computer as closed user groups, to keep track of company research and budgeting around the world.

Smaller businesses are expected to use the system to keep up-to-date with international business information that affects them directly. Information will come from data base producers, as well as from financial institutions and publishers. Current information providers to Prestel International in the U.S. include The Wall Street Journal and Merrill Lynch.

Prestel International is expected to provide updated information more cheaply than is currently possible with on-line computers, and more rapidly than printed materials.

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030281
You are invited to attend the U.S. launch of the Prestel® world videotex service from its Boston-based computer.

ON: Tuesday, January 19, 1982, 11 a.m.

AT: The Georgian Room, Mezzanine Floor
The Boston Park Plaza Hotel
Park Square at 64 Arlington Street

Guests of honor will include:

His Excellency Edward J. King
Governor of Massachusetts

Mr. Philip McKeerney
Her Majesty's Consul General, Boston

Mr. Frank Burgess
Managing Director of Prestel
British Telecom

Mr. William Shrimpton
President
BVT

Commissioner Ernest Lucci
Massachusetts Department of
Commerce and Development

Plus representatives of U.S. manufacturers of videotex hardware and software including AVCO, Zenith, Wolfdaf, Logica and Radofin

Prestel, the world's leading commercial videotex service, connects a database of 200,000 pages of computerized information to business and home users via telephone lines. The Boston computer will give U.S. users local telephone call access (via Telenet) to the Prestel database and allow corporations to become operators of their own videotex service within the U.S.

Come join us for a hands-on demonstration of Prestel and experience its multiple interactive capabilities.

RSVP Julie Wang 212/599-6924 -or- Diane Davis 617/267-4920
Manning, Selvage & Lee Diane Davis Associates

© Prestel is the registered trademark of British Telecom.
Mr. David P. Chandler
Mattell Electronics
5150 Rosencrans Avenue
Hawthorne, California 90250

Dear PRESTEL User:

Happy New Year to you! We at Logica Inc. are still celebrating the new year since 1982 is the start of a new era for videotex in the U.S. This month marks the official opening of the first PRESTEL computer on American soil. Named after Thomas Jefferson, this GEC 4082 minicomputer will provide a bureau service for U.S. firms wishing to run their "own" videotex system or maintain private databases. "Jefferson" will also provide a link making access to the PRESTEL World Service easier and, in most cases, less costlier to you.

The PRESTEL World Service database comprises over 200,000 pages of information from international information sources. It includes the PRESTEL UK database and information integrated from the PRESTEL International Market Trial.

In order to access the PRESTEL World Service via "Jefferson" dial any one of the following telephone numbers:

617-657-6474
617-657-6475
617-657-6476

When you hear the datatone, depress the data button on your phone. You will then be prompted for your PRESTEL passwords. Note that this is a direct dial call to Boston, Massachusetts.
Mr. David P. Chandler

You may also continue to access the World Service through the RCA Low Speed Data Service and by dialling direct to Great Britain:

011-44-1-600-6421

Should you have trouble in accessing PRESTEL, please notify me at Logica Inc. I can be reached during our regular working hours of 9:00 am to 5:30 pm. At all other times, you may contact the Prestel Operations Center in Great Britain by dialling:

011-44-1-638-6631

Please feel free to contact me if you need more information about your account or about using the Prestel service.

Very truly yours,

Rosemary L. Azzaro
Manager, Customer Services

P.S. Good news for Apple II and Apple II Plus microcomputer users! Floppy disks are available from Logica Inc. to allow you to access PRESTEL with your Apple. See the enclosed "Appletel" Fact Sheet for details!

Enclosure
APPLETEL FACT SHEET

1. For Apple owners Logica announces a new way to subscribe to PRESTEL avoiding virtually all terminal and installation costs. With an Appletel software package your Apple II becomes an extremely powerful machine, a combination of desktop computer and sophisticated PRESTEL receiver. With Appletel, no components are involved.

2. PRESTEL(R), the world's leading videotex service, is an information system and a communications network for business or home users. It operates via the telephone line and is simple to use. Information is provided by numerous well-known independent organizations who contribute to over 200,000 regularly updated pages already available. People interested in commodities finance, and travel particularly will find the speed and accuracy of the database invaluable. PRESTEL is interactive so you can send and receive messages via the system throughout the U.S. or around the world. You can also rent space on PRESTEL computers to establish your own confidential database, or private videotex system. PRESTEL is a versatile and user-friendly technology.
3. Appletel Cost:
   - $85.00 (two discs plus instruction manual)

PRESTEL User Costs:
   - $50.00 per month per registration
   - $0.30 per minute connect charge
   - $0.15 per minute communications charge (Telenet)

4. The Appletel software package consists of a floppy disc (and a spare) plus an instruction manual with details of registration and how to use PRESTEL. With the package you will be able to:
   - access the entire public PRESTEL database.
   - fully utilize the PRESTEL response and mailbox facilities to send and receive messages.
   - automatically dial up and log into PRESTEL.
   - automatically call up, examine, amend, store, re-call or delete sequences of PRESTEL information you regularly need.
   - store pages on your disc and examine them offline at leisure.
   - locally edit Prestel frames offline to annotate or comment on the information.

5. Appletel System Features:
   - black and white alphanumeric and graphic character display to full PRESTEL standard.
   - storage capacity of 60 frames on each Appletel master disc, and 200 frames capacity on each Appletel blank disc.
   - storage capacity of 10 sequences of command per disc. Each sequence is made up of 46 commands for storage and retrieval of PRESTEL pages.
6. **Required Computer Configuration**
   - Apple II Microcomputer with 48K RAM
   - Monitor (RGB Monitor for PRESTEL color display)
   - At least one Disc II Drive (2nd drive needed if large frame storage or disc copying required)
   - Hayes Micromodem II*

7. **Appletel Add-Ons**
   - Printers for hard copy. e.g. Paper Tiger or TCM 200 available now.
   - Available mid-1982: Appletel Color Card - enabling you to upgrade the system to full color.
   - Available mid-1982: A.P.E.S. Appletel Professional Editing System, enabling you to become an information provider on PRESTEL creating, editing and managing your own frames.

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Apple II and Disk II are registered trademarks of Apple Computer Inc.

Appletel is a registered trademark of Owl Computers.

* Indicates trademark of Hayes Microcomputer Products, Inc.
FOR RELEASE JUNE 28, 1982

PRESTEL LEADS THE WORLD
AS A COMMERCIAL VIDEOTEX SERVICE

NEW YORK, June 28, 1982 -- With 98 percent of videotex and teletext terminals worldwide operating on Prestel-compatible standards,* Prestel continues to set the pace for videotex developments, Richard Hooper, Chief Executive, Information Services for British Telecom, announced at Videotex '82 today.

In an update on Prestel worldwide Hooper made the following points:

. Prestel is a commercial service available in the U.S. and more than 20 other countries.

. Prestel has 18,000 users, 150 of them in the U.S. and over 900 information providers -- among them American publishers, advertising agencies and corporations, providing over 220,000 pages of information, and gaining 6 million accesses a month.

. Gateway technology, permitting banking, shopping and other transactional services from the home, is operating on Prestel and is being developed in the U.S. for home banking in a joint venture undertaken by British Telecom, Logica and Financial Interstate Services Corporation. In Europe, Gateway will link videotex systems operating in Britain, Holland and West Germany.

-more-

* Results of worldwide census on videotex and teletext activities conducted on April 1, 1982 by CSPI International, 90 Park Avenue, New York, NY 10016.
200 Prestel terminals have been installed at the Knoxville World's Fair to provide visitors with an interactive World's Fair database.

The travel database on Prestel now includes Skyguide -- a direct link provided by American Express to airport terminal arrival and departure scheduling boards; Room Service -- booking capability to city and airport hotels in the U.S. and worldwide, including the New York Hilton, Sheraton Center, St. Regis, Grand Hyatt, etc.

The Prestel shipping database now includes a Lloyd's of London Press service tracking 22,000 merchant vessels in 800 ports worldwide. The Lloyd's service is updated three times a week and includes arrival and departure details on ships, casualty reports, port conditions and delays and information on freight rates and connections with vessels.

Over 100 different types of Prestel sets or adaptors are available from 40 suppliers. In the U.S. an $85 "Appletel" floppy disc connects Apple II users to Prestel; Radofin and Wolfdata are making videotex adaptors for home television sets, at prices ranging from $250 to $650. Zenith is making Prestel terminals, and software for TRS-80 terminals will be available shortly.

Some 15 companies are now making Prestel-compatible videotex systems. They include IBM, Rediffusion, Aregon, Modcomp, Computex, ICL and Systems Design Ltd. Between them, these companies have sold 200 videotex systems worldwide, working to the Prestel standard.

Information providers are generating income from their services on Prestel. The most prominent of these are Viewtel 202, the service operated by the Birmingham Post & Mail and Intercom Videotex, a commodities price update service from the London, New York, Chicago and Far Eastern exchanges.

Picture Prestel, providing full photographic capability, will be introduced commercially in 1983.
TORCH COMPUTER CORPORATION
61 Commerce Way, Woburn, MA 01801. Telephone (617) 935-2575

For Release;
February 8, 1983

TORCH INTRODUCES PRESTEL COMPUTER

Torch Computers Limited, one of Britain's most successful microcomputer manufacturers, has introduced a new terminal for Prestel users in North America. The machine utilises fast downloading software to dump data to disk quickly and accurately, giving real savings in the costs of call time. The software also allows time-delay operations for information transferral during inexpensive off-peak periods.

A 16-gate mainframe Prestel terminal will come on-line in Boston; the first microcomputer based VIEWDATA system ever installed for private users. Known as FLASHLIGHT, the central machine will use software developed in association with Metrotel to offer bulk update facilities and local VIEWDATA information.

The Prestel system will be built around the unique Torch communicating computer. This full color machine offers interactive electronic mail as well as all the benefits of an advanced microcomputer. The standard machine features two 480K disk drives, dual 8 bit processors, and 96K of RAM. All Torch micros have a built in modem, fully approved by the Federal Communications Commission (FCC) as well as British Telecom in the United Kingdom. The micro is fully compatible with CP/M, giving access to a wide variety of commercially available software. The Torch comes bundled with software including Torchmail, Torchgraph, and Executive Aid, a word processing/database card index/diary package.

A local Prestel type system employing the first ever micro-based VIEWDATA host, will supplement the U.K. Hogarth (Prestel) mainframe at a fraction of the cost of traditional systems. This VIEWDATA host will be located in Boston, MA and will have as many as 100 modems. As an introduction to the service, Torch is offering their communications micro with Prestel software at $3950—$1000 off list price — to new and existing Prestel customers who order within 90 days of the product launch.
Options to the system include hard disk machines of either 10 or 21 megabytes, and the "SuperTorch"- a triple processor machine with a Motorola 68000 chip and an additional 256K of RAM. To reduce the overall cost of multi-user systems, Torch will offer a Prestel modem for Apple, Commodore, Tynex/Sinclair and Acorn computers effective April 1, 1983.

Torch Computers Limited is one of the fastest growing microcomputer companies in the world. Based in Cambridge, England, Torch was founded in 1981 and in just 18 months released a dual processor microcomputer and a 68000 based 16 bit machine. The product range includes some 30 other microcomputer products. Torch boasts of being one the youngest companies ever to be included on the U.K. government procurement list.

Torch, a well capitalised and managed entity, almost exclusively employs the top graduates of Cambridge (England) University. Torch has manufacturing facilities in Wales, and international offices in Boston and Toronto. Run by two chartered accountants, Torch is competitive and aggressively looking for rapid growth in the high technology arena.

For Further Information:

Fred Madeira
Torch Computer Corporation
61 Commerce Way
Woburn, MA 01801
Tel: (617) 935-2575

Bob Gerber
Torch Computers
7246 Woodbine Ave.-#207
Markham, Ontario
Tel: (416) 475-8622
After March 31, 1982 Prestel will be accessible only through the GTE Telenet Public Network, or by direct dial. To utilize Telenet you will be required to become a Telenet subscriber. The costs for this service are:

- $10 per connect hour
- $12 per kilosegment (a segment contains 64 characters)
- $20 per month for an ID/Password Account

This translates into approximately $.90-$1.10 per minute for communications charges and is in addition to the Prestel charge.

To become a Telenet subscriber you should contact your nearest Telenet office and obtain an application.

After you receive your Telenet ID, refer to the enclosed instruction sheet for the Prestel access Procedure for Telenet.

If you do not intend to continue your Prestel subscription, please notify Mr. Al Pearson at Logica Inc. immediately and we will terminate your subscription at any time you desire. Logica's telephone number is 212-599-0828.
ACCESS TO PRESTEL VIA TELNET

1. Dial the nearest Telenet access number. (See Telenet Public Dial Listing).

2. When your terminal is connected to the Telenet network type two carriage returns (CR).

3. Telenet will give you a port identification number and ask you to identify your terminal type.

EXAMPLE:

    TELENET
    212  7Y

    TERMINAL =

4. Type your terminal type (D1) followed by a carriage return or carriage return only. The Telenet system will respond with an @ symbol.

5. Type in "ID space" and the identification provided by your GTE Telenet representative upon registration followed by a Carriage Return (CR). The system will then ask for your password.

EXAMPLE

    PASSWORD =

6. Enter the password provided by your Telenet representative followed by a carriage return. The password will not display on your terminal. The Telenet system will respond with an @ symbol.

7. After Telenet prompts with an @, type C followed by a space and the network address. The following is the network address:

   023411002002000   Hogarth

8. Telenet will respond with a connection message and your terminal will then be connected to the selected Prestel host computer.

9. The logon page of Prestel will then be displayed and the standard user number, password and personal password logon procedure should be followed.