# Bureau of Engraving and Printing Tactile Feature Program: Small Panel Interview Protocol Script

## INTRODUCTION

Thank you for agreeing to answer questions about tactile features to be incorporated into future U.S. Currency.  Let me explain the process and its components to help educate you of the raised tactile feature and our service and commitments during the next couple of days with you.

 The Bureau of Engraving and Printing produces all of the nation's paper currency, which is then issued by the Federal Reserve. The BEP  is planning to add tactile symbols to paper money so that blind  and visually impaired people can use their sense of touch to denominate different sample bills, that is, determine whether the sample bill is a $5, $10, or $20, for example.  We are still undergoing research, in an attempt   to find the most efficient and practical symbols to use for the B&VI Community.  .

During this process, I'll be asking you to hold and feel different samples with raised tactile symbols.  To identify   the number symbols which are the most perceptible to you.  Explain the entire process or procedure here if applicable.

Notifications

## Paperwork Reduction Act Notifications

Before we get started, I have to provide you several notifications required under the Paperwork Reduction Act (PRA). The questions being asked and your responses constitute a collection of information that is subject to the requirements of the PRA.

- The purpose of this information collection is to determine which tactile features may be the most effective in providing

a means of assisting blind and visually impaired individuals in denominating U.S. paper currency.

- The information provided during this collection of information will be reviewed by the BEP, the Department of The Treasury, The Federal Reserve Board, The Federal Reserve Bank – Currency Technology Office, and the US Secret Service. The information will help these agencies analyze and collaborate on what types of tactile features are most effective.
- We estimate it will take 30 minutes for you to answer the questions being asked today.
- You are advised that your participation is completely voluntary, there is no obligation for you to provide responses, and you can decide to end the interview at any time.
- I want to assure you that the BEP will in no means collect any personally identifiable information (PII) from you today. You will not be asked your name, address, phone number, social security number, birthday, or any other information that could be used to personally identify you.
- BEP will maintain strict confidentiality of your responses.  . The BEP may, however, share the results of this information collection with other agencies for the purposes of tactile feature development. In addition, BEP is obligated to provide records in response to requests submitted under the Freedom of Information Act. Again, please note that no information that can identify you personally will be collected today.
- BEP is obligated to inform you that today's information collection must be conducted under a valid control number issued by the Office of Management and Budget (OMB). The information collection being conducted today has been approved by OMB pursuant to a generic approval process; under the OMB control number 1520-0009.  The clearance is posted on the OMB Office of Information and Regulatory

Affairs Information Collection Review Dashboard, available at www.reginfo.gov.

## INTRODUCTION TO RESPONDENT TASKS

*In all tasks, the interviewer will hand bills to the respondent one at a time, with the symbols on the upward facing side, from the respondent's perspective. The respondent will feel each bill and state whether or not the bill has any tactile features on it and identify the number of features.*

## Task 1: Introductory task to familiarize the respondents with the banknotes and testing process

Today I have two sets of application methods with various location prototypes each. Each set will have symbols representing five currency denominations (dollar bills), the $5, $10, $20, $50, and $100.   I have several different sets of these notes, which differ with respect to their design (location, style) and to how the designs were made. The symbols are in the form of rectangles or ribbons on the right side or the lower.-left corner, which you can feel with your fingers.  By doing so you will be providing us feedback to help us study an important question—what is the best location/style and application method to make the tactile identification of currency possible?

So what I'm going to do is run you through a familiarization task with test samples.  We'll do it several times because I'm going to be handing you different samples and asking you if you can detect a tactile feature and how many. The features will be on the right side or the bottom left and I will let you know the location to assure you have the opportunity to get the required results.

When you have completed feeling the bill, I'd like you to tell me whether or not the sample bill had any raised feature on it and if

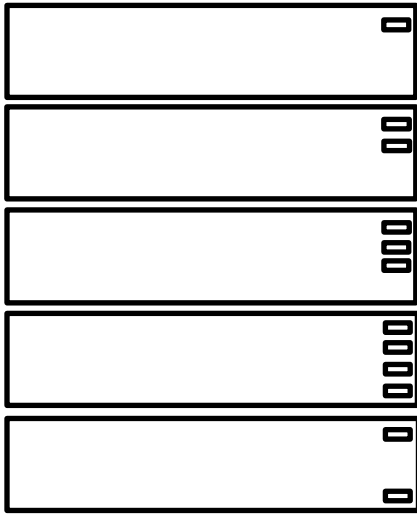so how many.  If there are two raised features I'll ask if they were close together or separated.
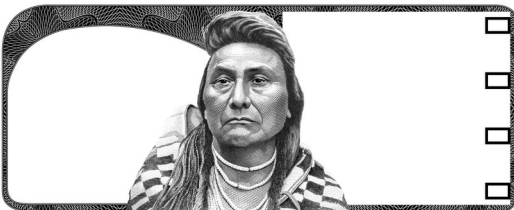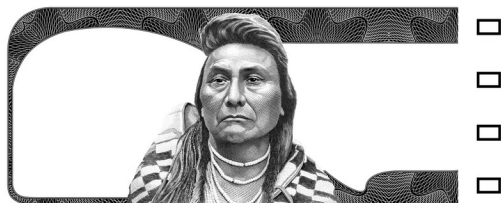


Figure1. The configurations of the symbols on the right side of the bills

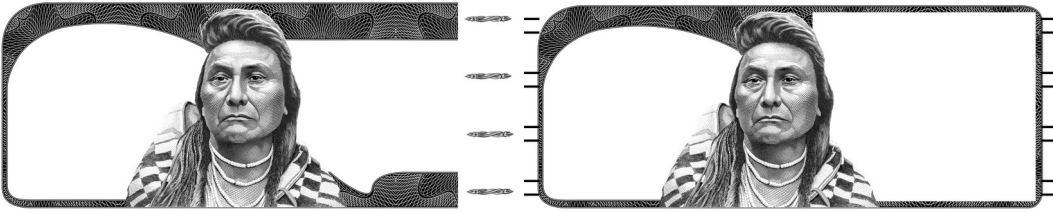The different RTF side location/style types are shown below:
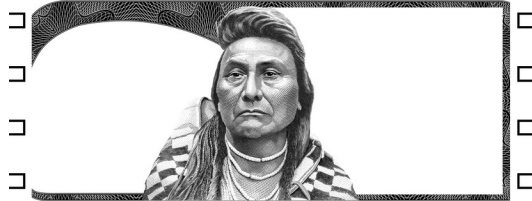
**Sample A/G**



**Sample B/H**



**Sample C/J**

**Sample D/K**

**Sample E/L**

All right, let's start with the first sample bills.

This first part is a familiarization step with the tactile features on the right side of the bills. I'll be asking you to hold a bill. When we do this, we'll start with you holding the bill near the location of the tactile feature.  Hold this bill for a moment (i*nterviewer hands a bill to the respondent*). When I hand you a bill, <u>hold it with your left hand between the thumb and forefinger</u> (*pause for R to get into this position*), <u>and with your other hand, keep your thumb and forefinger on the right side of the bill</u>, away from the symbols. And we'd like you to keep the bill up off of the table. This is what we call the "starting position." You will feel down the bill and determine if you feel raised symbols on the bill.

Did the sample bill have any tactile feature on it and how many? (Please say the number of tactile features or say none if the sample bill has no tactile features on it at all). (*Repeat this for all the side sample bills*)

(*Repeat this for samples of each of the five side location/styles for each of the two application methods- 10 total samples*)

This second part is a familiarization step with the tactile features on the bottom right of the bills. I'll be asking you to hold a bill.

When we do this, we'll start with you holding the bill near the location of the tactile feature.  Hold this bill for a moment (*interviewer hands a bill to the respondent*). When I hand you a bill, <u>hold it with your right hand between the thumb and forefinger</u> (*pause for R to get into this position*), <u>and with your other hand, keep your thumb and forefinger near the bottom left of the bill</u>, away from the symbols. And we'd like you to keep the bill up off of the table. This again is what we call the "starting position." You will feel across the bill and determine if you feel raised symbols on the bill.
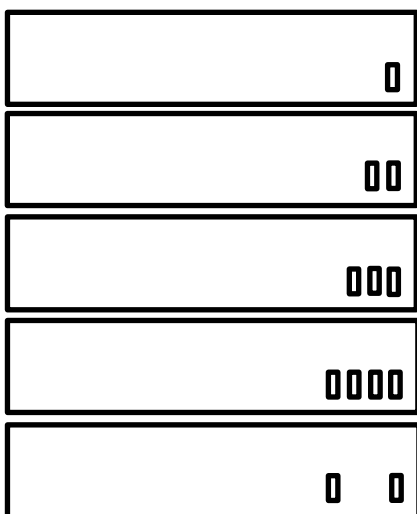


Figure 2. The configurations of the symbols on the bottom left of the bills

The RTF bottom location/style type is shown below:

**Sample F/M**

Did the sample bill have any tactile feature on it and how many? (Please say the number of tactile features or say none if the sample bill has no tactile features on it at all).

*(Repeat this for samples of the bottom location/style for each of the two application methods- 2 total samples)*

## Task 2: RTF Testing: Accuracy task with stacks of bills

*In this task, the interviewer will hand a stack of five bills to the respondent individually. The five bills in the stack bear the five symbol configurations noted above Figure 1 in random order. The symbols on all five bills in the stack will all be of the same type: Intaglio/Side Border Rectangle, Intaglio/Side No Border Rectangle, Intaglio/Side Twisted Rope Overlap, Intaglio/Side Open Ended Rectangle Overlap, Intaglio/ Side Closed End Rectangle Overlap, Intaglio/Bottom Rectangle, and Coated-Embossed / Side Border Rectangle, Coated -Embossed / Side No Border Rectangle, Coated-Embossed / Side Twisted Rope Overlap, Coated-Embossed / Side Open Ended Rectangle Overlap, Coated-Embossed / Side Closed End Rectangle Overlap, Coated -Embossed /Bottom Rectangle that have be through the wearing (circulation simulation) process. When the respondent is handed the first build the interviewer will state the location and start the timer. The respondent is handed the top bill in the stack, feels for the symbols, reports the number of tactile features, returns the bill, is handed the next bill in the stack, and repeats this process until five bill are completed. The interviewer will record the respondent's accuracy in identifying the number of symbols on each bill and how much time elapses at completion of the entire stack. The interviewer will also record the respondent's commentary on the ease of use (confidence factor) on a scale of 1-5 with 5 being the highest level of usefulness for each stack*

## Testing Task –Record Sample

## Task

|       | Correct | Incorrect |
|-------|---------|-----------|
| A3    | •       | •         |
| A4    | •       | •         |
| A1    | •       | •         |
| A2    | •       | •         |
| A2S   | •       | •         |

**Time:** _____

**STACK A:** On a scale from 1 to 5, where 5 is very easy and 1 is very difficult, how easy was it to count the number of tactile features? _____ (1 – 5)

*When the respondent finishes the first stack of five bills, the interviewer will present the next stack*

This will be continued and be repeated to cover Task A through M corresponding to the Table 1 below in the pre-determined order:

| Sample ID/Task | Print Method | Prototype Location/Style |
|----------------|--------------|--------------------------|
| A | Intaglio | Right Side Border Rectangle |
| B | Intaglio | Right Side No Border Rectangle |
| C | Intaglio | Right Side Twisted Rope Overlap |
| D | Intaglio | Right Side Open Ended Rectangle Overlap |
| E | Intaglio | Right Side Closed End Rectangle Overlap |
| F | Intaglio | Right Bottom Rectangle |
| G | Coat-Emboss | Right Side Border Rectangle |
| H | Coat-Emboss | Right Side No Border Rectangle |

| | | |
|---|---|---|
| J | Coat-Emboss | Right Side Twisted Rope Overlap |
| K | Coat-Emboss | Right Side Open Ended Rectangle Overlap |
| L | Coat-Emboss | Right Side Closed End Rectangle Overlap |
| M | Coat-Emboss | Right Bottom Rectangle |

*The interviewer will present a total of twelve stacks in the pre-determined order.*

## Conduct of the RTF Testing

For this task, I'll be handing you a series of bills.  Each of the bills will have 1, 2, 3 or 4 tactile features, rectangles or ribbons on it.  If it has 2 features, they may be close together or spaced apart.  I will let you know if the feature is on the right side or the right bottom.

What I'd like for you to do is feel one bill at a time.  Feel the bill any way you like, but do not hold the bill against the table.  Then tell me how many symbols are on the bill and if they were spaced far apart.  Do this, for each of the five bills I hand you. I'd like you to do this as quickly as you can, but most importantly, I need you to be accurate too, okay?  After each stack I'll ask you to rate how easy or difficult it was to detect the tactile feature.  Our testing will consist of 12 stacks of bills, six in each application method (Intaglio & Coated-Embossing). At the end of each stack I will ask you to a number from 1-5 with five being the best (easiest) to detect and 1 being the worst.

All right then, let me know when you are ready and we will get started...

*(Do this for each of the feature types and applications.  Prior to each stack, provide the respondent with the sample tactile*

*feature location. Time each stack separately.  Start the timer the moment that the respondent starts.  Stop the timer the moment that the respondent states the number of features on the final sample bill.  After each stack, ask the respondent to rate the difficulty on a 1-5 scale, 5- very easy and 1-very difficult.)*

## Testing Task –A

## Task

|  | Correct | Incorrect |
|---|:---:|:---:|
| A3 | ● | ● |
| A4 | ● | ● |
| A1 | ● | ● |
| A2 | ● | ● |
| A2S | ● | ● |

**Time:** _____

**STACK A:** On a scale from 1 to 5, where 5 is very easy and 1 is very difficult, how easy was it to count the number of tactile features?  _____ (1 – 5)

Comments:

_____
_____
_____

*When the respondent finishes the first stack of five bills, the interviewer will present the next stack.  The interviewer will*

*present a total of twelve stacks including the six different RTF location/styles for each of the two application methods.*

*Repeat this task for each of the remaining 11 stacks recording the results as in the first task.*

*During the testing of each stack, record any pertinent comments from the respondent.*

*At the completion of the testing ask the respondent if they have any additional comments and thank them again for the voluntary participation.*

"Do you have any additional comments that might be useful in our development of the raised tactile feature?"

"Thank you again for your time and for volunteering to participated in the RTF development process. Your efforts will play a big role in our determination of the best feature available for our next new currency release."

*Provide any assistance the respondent needs in moving on to their next event.*