



Desktop Publishing

Presented by

Kathie Koppenhaver

Certified Questioned Document Examiner



Desktop Publishing

Desktop publishing is the creation of documents on a computer system.

Desktop publishing enables one to create all types of official-looking documents.

Desktop publishing has made the ability to counterfeit documents available to anyone with very little effort, talent or expense.

Desktop Publishing

In the past, counterfeiters needed complex equipment to create fraudulent documents.

- ▶ Counterfeiters needed skill in engraving.
- ▶ They needed expensive printers.
- ▶ They needed time to create their counterfeit documents.

Desktop Publishing

- ▶ Now anyone can create counterfeit documents with a computer system, a scanner and a printer.





Desktop Publishing

Check kits provide counterfeiters with safety paper that can be used to create counterfeit checks that cannot be distinguished from genuine checks since the technology is the same for both.



Desktop Publishing

- ▶ Checks contain many features that protect from fraud.
- ▶ This includes safety paper,
- ▶ Fugitive ink,
- ▶ Microprint,
- ▶ And the date the account was opened.

Desktop Publishing

ANNE D. BRIGHOFF 01-95
416 GLENBURN AVENUE
CAMBRIDGE, MD 21613

176

65-217/521

19

PAY TO THE
ORDER OF _____

\$

_____ DOLLARS



**BANK OF THE
EASTERN SHORE**
CAMBRIDGE, MARYLAND 21613

MEMO _____

MP

⑆052102176⑆01760114240206⑆

SAFETY PAPER



Desktop Publishing

- ▶ Additional information helps to detect fraudulent checks.
- ▶ The routing line contains information corresponding to various parts of a check.
- ▶ This includes the check identification number and the Federal Reserve Bank Clearing House.



FEDERAL RESERVE DISTRICTS


1. Boston
2. New York
3. Philadelphia
4. Cleveland
5. Richmond
6. Atlanta
7. Chicago
8. St. Louis
9. Minneapolis
10. Kansas City
11. Dallas
12. San Francisco

CITY PREFIXES

1. New York, NY
2. Chicago, IL
3. Philadelphia, PA
4. St. Louis, MO
5. Boston, MA
6. Cleveland, OH
7. Baltimore, MD
8. Pittsburgh, PA
9. Detroit, MI
10. Buffalo, NY
11. San Francisco, CA
12. Milwaukee, WI
13. Cincinnati, OH
14. New Orleans, LA
15. Washington, DC
16. Los Angeles, CA
17. Minneapolis, MN
18. Kansas City, MO
19. Seattle, WA
20. Indianapolis, IN
21. Louisville, KY
22. St Paul, MN
23. Denver, CO
24. Portland, OR
25. Columbus, OH
26. Memphis, TN
27. Omaha, NB
28. Spokane, WA
29. Albany, NY
30. San Antonio, TX
31. Salt Lake City, UT
32. Dallas, TX
33. Des Moines, IA
34. Tacoma, WA
35. Houston, TX
36. St. Joseph, MO
37. Ft. Worth, TX
38. Savannah, GA
39. Oklahoma City, OK
40. Wichita, KS
41. Sioux City, IA
42. Pueblo, CO
43. Lincoln, NE
44. Topeka, KS
45. Dubuque, IA
46. Galveston, TX
47. Cedar Rapids, IA
48. Waco, TX
49. Muskogee, OK



STATE CODES



50. NY	64. GA	78. SD	92. ID
51. CT	65. MD	79. WI	93. MT
52. ME	66. NC	80. MO	94. NV
53. MA	67. SC	81. AR	95. NM
54. NH	68. VA	82. CO	96. OR
55. NJ	69. WV	83. KS	97. UT
56. OH	70. IL	84. LA	98. WA
57. RI	71. IN	85. MS	99. WY
58. VT	72. IA	86. OK	
59. AK, HI	73. KY	87. TN	
60. PA	74. MI	88. TX	
61. AL	75. MN	89.	
62. DE	76. NE	90. CA	
63. FL	77. ND	91. AZ	

Desktop Publishing

ANNE D. BRIGHOFF 01-95
416 GLENBURN AVENUE
CAMBRIDGE, MD 21613

176

65-217/521

19

PAY TO THE
ORDER OF _____

\$

_____ DOLLARS



BANK OF THE
EASTERN SHORE
CAMBRIDGE, MARYLAND 21613

MEMO _____

MP

+ 1 0 5 2 1 0 2 1 7 6 1 0 1 7 6 0 1 1 4 2 4 0 2 0 6 ||

SAFETY PAPER



Desktop Publishing

Some check kits use plain paper to create personal checks.

These check kits can be used to create counterfeit checks as well.



Desktop Publishing

Check counterfeiters use a well-known company name.

They use a high check number.

They indicate that the account has been open for some time.

They frequently create Payroll checks as these are more easily cashed.



Desktop Publishing

- ▶ Perforations

- ▶ All but government checks are perforated on one side.

- ▶ Microprint

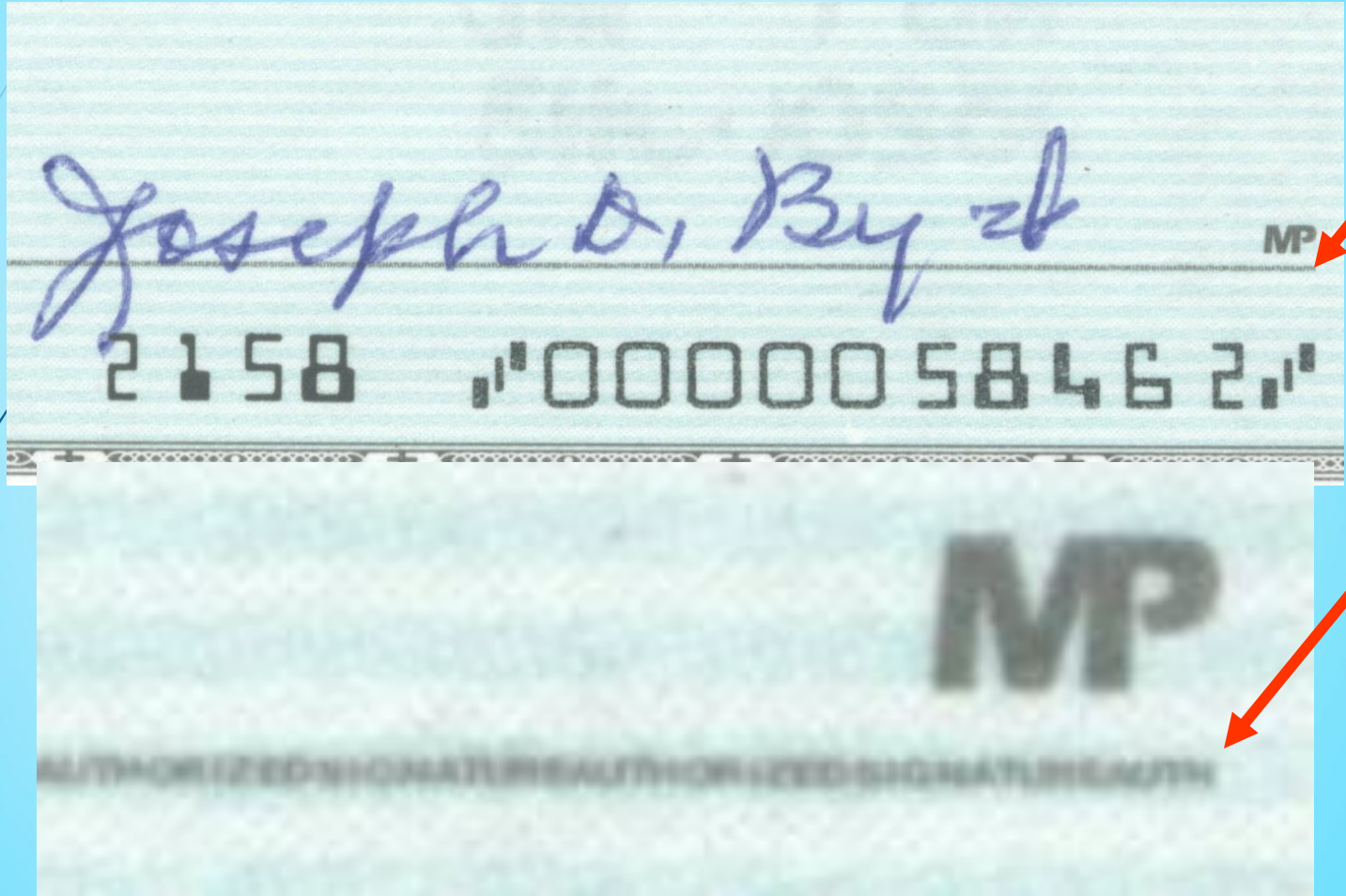
- ▶ Microprint is very small writing used on documents.

- ▶ Microprint looks like a writing line.

Desktop Publishing



Desktop Publishing





Desktop Publishing

- ▶ How can you spot a computer-generated counterfeit check?
 - ▶ Check out the alignment.
 - ▶ Check the cut edges.
 - ▶ Check for perforations on at least one side.
 - ▶ Check the routing number.
 - ▶ Check the bank number.



Desktop Publishing

- To determine if it is a laser copy, make a sharp fold over some of the type and scrape the edge. If it flakes, it may be toner from a laser printer instead of ink.



Desktop Publishing

- Check the signatures including the endorsement on the back of the check to determine if they were written by the same person.



Desktop Publishing

- ▶ What else can be created on a modern computer system?
 - ▶ Business transactions
 - ▶ Business records,
 - ▶ Letters of recommendation,
 - ▶ Expense account receipts,
 - ▶ Diplomas,
 - ▶ and
 - ▶ Phony letterheads.



Desktop Publishing

- ▶ People have given themselves College Degrees claiming that they have a college degree when they do not.
- ▶ It is necessary to verify credentials.
- ▶ Document examiners sometimes have to investigate an opposing examiner for their client.

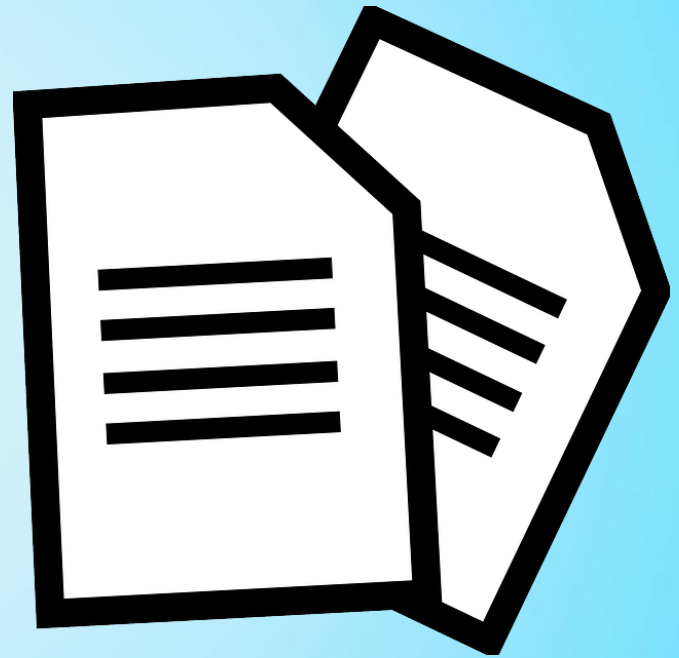


Desktop Publishing

- ▶ Additional counterfeit documents:
- ▶ Financial instruments
 - ▶ Bank records
 - ▶ Cashier's checks,
 - ▶ Certified checks,
 - ▶ Letters of credit.
 - ▶ Securities
 - ▶ Stock certificates,
 - ▶ Bonds.

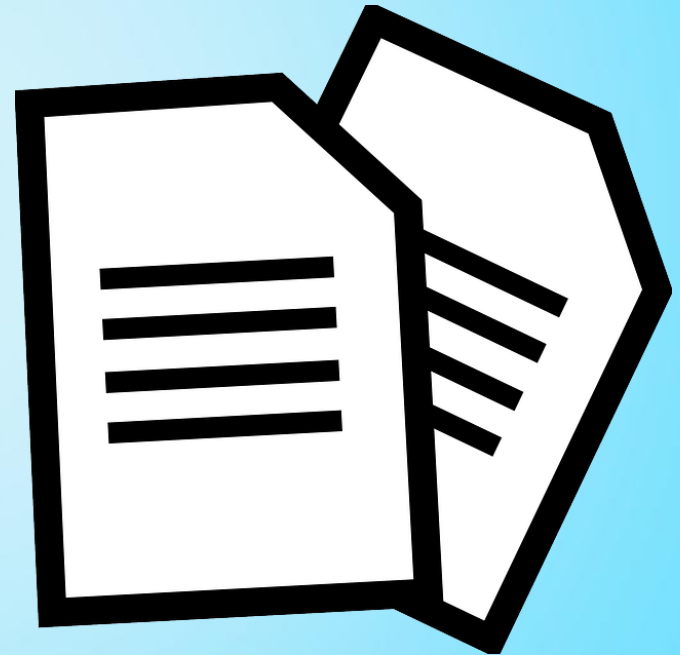
Desktop Publishing

- ▶ Other documents
 - ▶ Property records,
 - ▶ Insurance claims,
 - ▶ Passports,
 - ▶ Birth certificates.



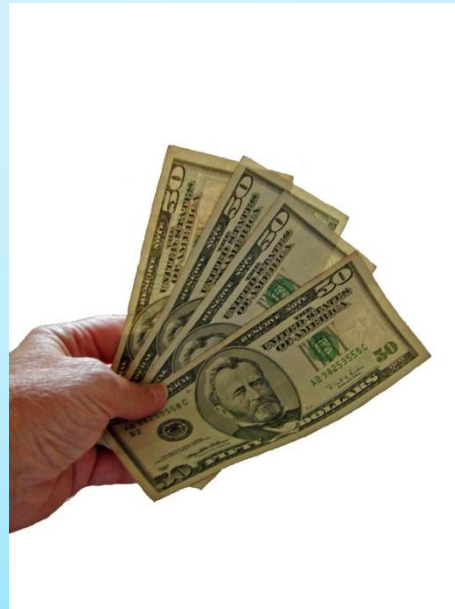
Desktop Publishing

- ▶ Admission tickets
- ▶ Gift certificates
- ▶ Refund checks



Desktop Publishing

- ▶ The Bureau of Engraving and Printing has introduced polyester threads in its bills to prevent color copiers from duplicating our paper money.





Desktop Publishing

- ▶ Counterfeit documents are being created using the same technology as genuine documents.
- ▶ However, some documents can be identified as fraudulent because of mistakes made by counterfeiters.



Desktop Publishing

- ▶ Ways to protect your forms from being scanned and copied.
 - ▶ Use tamper-proof paper or special ink.
 - ▶ Use artificial water marks that can be seen at an angle but cannot be copied by a scanner .



Desktop Publishing

- ▶ Frank Abagnale was a forger and an imposter.
- ▶ He defrauded many companies.
- ▶ He was arrested and served time. The FBI invited him to work with them to devise ways of detecting bogus documents and to put in safety measures to protect from fraudulent transactions.



Desktop Publishing

- ▶ Frank Abagnale created many features to eliminate fraudulent documents being passed.
- ▶ However, today's system is not full-proof because of modern reproductions that can be created on personal computers.




Desktop Publishing

- ▶ Cut and paste documents are harder to detect when they are created on a computer.
- ▶ There is usually no misalignment on cut and paste documents generated by computer.
- ▶ However, there may be a different font or a different generation.



Desktop Publishing

The first paragraph of
This agreement shall
written notice.




Except as herein expr
Agreement shall rema

Desktop Publishing

BY ENDORSEMENT THIS CHECK WHEN PAID IS ACCEPTED IN FULL PAYMENT OF THE FOLLOWING ACCOUNT

TOTAL			
DISCOUNT			
AMOUNT OF CHECK			

 Jack D. Showalter, Contractor
QUALITY HOMES

691

JUL 12 1962 19

60-142
313

PAY TO THE ORDER OF *Mary F. Showalter* 160⁰⁰

one Hundred Sixty & 00/100 DOLLARS

CONTRACTOR

THE FIRST NATIONAL BANK
CLIFTON FORGE, VA.

Jack D. Showalter

⑆05 14 0 14 2⑆



Desktop Publishing

- ▶ Pages may be substituted.
- ▶ Substituted pages may have
 - ▶ a different font,
 - ▶ be printed on a different printer,
 - ▶ different margins or
 - ▶ a different type of paper.



Desktop Publishing

- ▶ Pages may be altered.
 - ▶ Material may be deleted.
 - ▶ Material may be added.
 - ▶ Material may be overwritten.



Desktop Publishing

- ▶ Substituted pages may have
 - ▶ a different font,
 - ▶ be printed on a different printer,
 - ▶ Different margins or
 - ▶ a different type of paper.



Desktop Publishing

► Identifying Additions

1. Writing is crowded.
2. Different writing instruments used.
3. Inconsistent with original writing on documents.
4. Additions written over deletions of other material.
5. Cross outs.

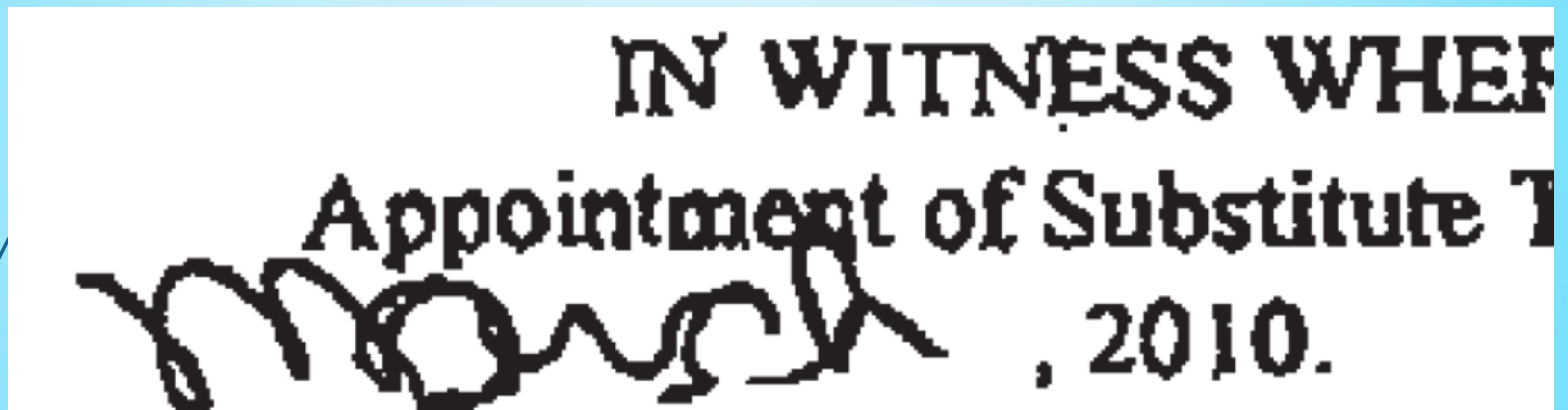


Desktop Publishing

- ▶ Substituted pages may have
 - ▶ a different font,
 - ▶ Be printed on a different printer,
 - ▶ Different margins or
 - ▶ A different type of paper.

Desktop Publishing

- Remains of artifacts left on a document.





Desktop Publishing

- Document examiners need to use all available resources to identify bogus documents.
 - Look for mistakes made.
 - Look for misalignment.
 - Look for missing information.