

The Challenges of Change: The Bureau of Engraving and Printing and Modernizing Stamp Production in the Decade After World War II

By Cecilia Wertheimer

Winton M. Blount Symposium on Postal History, November 4, 2006
Smithsonian National Postal Museum, Washington, D.C.

Introduction

The post war period of the late 1940s and early 1950s was not the first era in which change at the Bureau of Engraving and Printing occurred. Rather, change had always been essential to the existence of the agency. The very small effort of those (now legendary) four women and one man who began work in the Treasury with Spencer Clark in 1862 was, in itself, an experiment. The need to adapt, improve, face challenges, and change has been perhaps the very life-blood of the Bureau's operations. Virtually every historic event in the last 145 years of our country, every major challenge to the safety of our nation's paper currency, and every modification required in the appearance or content of most of our nation's securities have all provided the Bureau with a continuous, almost cyclical stream of challenges. In each case, the Bureau adapted to meet the needs of an ever-growing, ever-evolving country.

By 1946, the Bureau had a history of improving upon itself and its products, but, arguably, the Director of the Bureau and his employees had never faced a period like that of the post World War II era. The challenges they were presented and the goals that they set for themselves set the bar for improvements at an unprecedented level. Among the challenges they faced was the increasing cry for more colorful postage stamps and among the goals, dry printing.

Early Interest in Multicolor Stamps

In 1937, the Bureau had set up a laboratory for development of equipment and for experimentation to improve the products of the Bureau.¹ At this time, research began on various projects that would come to fruition two decades later: that is, dry printing and nonoffsetting green and black inks. About this time, the new research staff began also to consider ways to produce multicolor postage stamps.²

But while Bureau personnel were still only contemplating production methods other than intaglio, in Europe, new technology was already being used to print multicolor postage stamps. At least one European company had been working with gravure

¹ *Bureau of Engraving and Printing (BEP), Report of Activities, December 22, 1924 to December 1, 1952* (Washington, DC: BEP), pg 8.

² James H. Baxter, "Experimental Bi-color Rotary Web-fed Press," *The Bureau Specialist*, June 1955, pg 163.

printing (a form of intaglio printing) as early as 1931³, and by 1935, a number of foreign countries, including Great Britain, had issued gravure stamps.⁴ By 1939, the process of rotogravure (gravure printing using rotary cylinders on web-fed presses) was said, in an article by one philatelic expert, to have been “perfected,” stating, “Of recent years the rotogravure process of printing British stamps has been in use chiefly as a means of reducing the cost of stamp production. This method [has resulted] in the production of beautiful stamps many colors of which are unusually attractive.” Nevertheless, the author went on, the steel-engraved United States postage stamps “unquestionably are the finest stamps produced...equal to none. For some years unsuccessful attempts have been made in the United States to create sufficient interest to supplant engraving with these 'gravure' processes...”⁵

In fact, this was exactly the issue the Bureau was facing at the end of the 1930s: how *would* the Bureau provide multicolor stamps to a generation of citizens becoming more familiar with the 20th century reality of multicolor publication. The move to multicolor production would not be easy. At the Bureau, the prevailing wisdom was that line engraving was the greatest deterrent to counterfeiting; the prevailing opinion was that line engraving produced the most beautiful product; and the prevailing technology was for printing line engravings. The move to multicolor production in stamps would require not only a major shift in production methods, it would require a gigantic shift in long-held beliefs. Indeed, the technological changes that were just beginning to take shape in the late 1930s combined with the political pressures placed on the Bureau in the post-World War II era would, by the 1950s, require concomitant changes from the Bureau’s employees.

The Modernization Program

In 1949, the Bureau’s Director Alvin Hall set out a “modernization program” for his agency. Phase I of the program would be to update existing presses and equipment with new features for faster, more efficient currency production. This included such additions as automatic delivery and take-off units for the four-plate flatbed power presses.

The plan for Phase II was to bring in new technology, including newer higher-speed presses. At the heart of the new technology would be dry printing.

Dry printing of U.S. paper money had been tried as early as the 1860s but had not been used in the production of currency or stamps since then. The problems with this kind of production were the immense pressure required by the press to force

³ James A. Conlon, “Growth of Gravure in Postage Stamps,” *Gravure Bulletin*, Winter 1979, pg. 96.

⁴ “Ecuador Issues Volcano Series of Two Stamps, Notes on Other New Sets Put out by Many Countries,” *The Washington Post*, May 13, 1934, pg. X9; “Philatelic Notes,” *The Washington Post*, pg. AS9; “Mail Union Bulletin Arrives From Berne,” *The Washington Post*, March 3, 1935, pg. SA11.

⁵ William M. Stuart, “The Washington Philatelist,” *The Washington Post*, July 2, 1939, pg. A11.

the printing inks into the dry paper and the requisite formulation of inks to make them stay there.

Wet printing required more time and many more steps in the production process than dry printing and more employees to perform the work. Distortion occurred due to the alternating stages of wetting and drying the paper, and distortion made registration more difficult and caused more printed waste.

Dry printing, by contrast, would speed up production and lower time and personnel costs by reducing the number of production steps and reducing registration problems. It would also, if the inks dried fast enough, allow for consecutive printings of different colors in one pass of the paper through the press. In the post-war era of economization and efficiency of operations, Bureau Director Hall recognized that changes such as these were essential and his modernization program fit the bill. He and his staff of developmental engineers also recognized the potential for multicolor production but, in order to get there, the problems with dry printing would have to be overcome.

Political Change

The size of the Bureau's and the country's operations had expanded during World War II, generally meeting the demands of the conflict by, primarily, throwing more, often unskilled, bodies into the work. There was simply not the luxury of time to develop more efficient methods or operations for the Bureau to produce the onslaught of documents required to fund and support the war effort. By 1943, the Bureau's offices, hallways, and every other available space were filled to capacity with over 8000 employees printing, processing, and packaging securities.⁶

But, two years later, as the mammoth war effort began to wind down, the Bureau, like the rest of the Government, was faced with the even greater task of dealing with the inefficiency, the ad hoc organizational structures, and the massive numbers of employees that remained. As the Government struggled to return to a peacetime economy, the demand for a major Federal house-cleaning grew.

The call for Government-wide reorganization and improved efficiency had been made at other times as well. Congressional and Presidential programs and commissions had been created to recommend and develop solutions from the 1890s on. But none of the previous Government-wide programs are said to have had much effect.⁷ The post-war efforts of the 1940s and 1950s would ultimately prove to be more effective, reaching down to bring change at all levels of Government, including the Bureau of Engraving and Printing.

⁶ *Annual Report of the Director of the Bureau of Engraving and Printing* (Washington, DC: BEP, 1944), pg 100. (Hereafter cited as *Director's Report*.)

⁷ Neil MacNeil and Harold W. Metz, *The Hoover Report, 1953-1955, What It Means to You as a Citizen and Taxpayer* (New York: The MacMillan Company, 1956), pp 8-9.

Immediately after the war ended, efforts began to sort out the problems of an oversized Government. In December 1945, Congress passed an act giving President Harry Truman temporary reorganization authority. These first initiatives by the President were limited in scope and targeted the national security agencies, the military, and housing agencies.⁸

In 1947, in a political move to gain an upper hand over Truman, a Republican-controlled Congress created the Commission on the Organization of the Executive Branch of the Government. Commonly known for the man who headed the Commission, former President Herbert Hoover, the First Hoover Commission's tasks included studying the organization that was the Federal Government and recommending ways to reorganize and economize its operations.

Despite Congress' political move, the Commission worked independently of and cooperatively with both the Congress and the President. Its members were named from both Republican and Democratic ranks but also included prominent citizens, professionals, and business leaders. Of the 300 task force members Hoover selected, many were business executives and to assist them Hoover hired private sector management firms. Though still relatively few in number, the work of management consulting firms was sufficiently influential to be recognized by Hoover as a cost effective and valuable means to gain insight into the operations of the Federal Government.⁹

After two years of study, in 1949 the First Hoover Commission issued 273 recommendations encompassing broad areas of Federal operations, including budgeting and accounting methods, personnel policy, property, and procurement practices. Among its findings, the Commission's task force report on Federal Personnel found inherent problems in the Federal civil service, which had become "badly disorganized by the war and its aftermath," and in the Government's procedures for procuring, developing, compensating, and supervising personnel.¹⁰

None of the Hoover Commission's reports dealt specifically with the operations of the Bureau of Engraving and Printing. However, the two reports dealing with Budgeting and Accounting and the Treasury Department, would prove advantageous to the agency in making one significant change. In a 1950 summary recounting the actions taken as a result of these two Commission reports, the list of accomplishments includes Public Law 656 of August 4, 1950, providing for a

⁸ Brian Balogh, Joanna Gisinger, and Philip Zelikow. *Making Democracy Work: A Brief History of Twentieth Century Federal Executive Reorganization*. Miller Center Paper in American Political Development, University of Virginia, July 22, 2002, pg 36.

⁹ Balogh, Gisinger, and Zelikow; Christopher D. McKenna, "Agents of Adhocracy: Management Consultants and the Reorganization of the Executive Branch, 1947-1949," *Business and Economic History*, Fall 1996, copyright 1996 by the Business History Conference.

¹⁰ "Summary of Recommendations and Plan of Implementation [Appendix A]," *Task Force Report on Federal Personnel, Prepared for the Commission on Organization of the Executive Branch of the Government* (Washington, DC: US Government Printing Office, January 1949), pg. 95.

business-type budget and a revolving fund method of financing at the Bureau of Engraving and Printing, effective July 1, 1951. The narrative of the action report explains, "The new basis makes possible less complicated and more understandable financial programs, and better planning and execution."¹¹ A similar report on actions taken, published in 1952, would clarify: "these changes were not specifically recommended by the Hoover Commission," the outcome, nevertheless, did "conform generally to the purposes set forth in its reports on the Treasury Department and budgeting and accounting."¹²

One of the earliest outcomes from the Hoover Commission's reports was the Reorganization Act of 1949, which gave the President the authority to create, abolish, or make changes to agencies of the Government's Executive Branch. As a result of this act, Truman would submit 35 reorganization plans over the next few years that were consistent with the Commission's findings.¹³ One of these was the Reorganization Plan No. 26 of 1950, which gave the Secretary of the Treasury responsibility for all functions of all of the agencies and employees within his Department. The Secretary, in turn, could authorize the performance of any function to any other officer, or by any agency or employee of the Department of the Treasury.¹⁴

Treasury Secretary John W. Snyder began at once to take advantage of his new authority, transferring certain responsibilities to the heads of his agencies and increasing their level of participation in management improvement efforts. As an example, on the same date that Truman's reorganization plan for the Treasury took effect, July 31, 1950, (and four days before Congress authorized the new business-type budget for the Bureau), Snyder transferred all functions incident to the procurement and handling of the distinctive currency and bond papers from the Bureau of the Public Debt to the Bureau of Engraving and Printing.¹⁵ A Treasury press release issued the next day reiterated the Government reorganization message, "The elimination of intermediate handling between the manufacturer of these distinctive papers and the bureau which prints the currency and securities will make for better management of these operations as well as reduce costs."¹⁶

As a matter of fact, in 1946, in an effort to get a handle on the operations and spending of his own department, Treasury Secretary Snyder had himself already instituted a program designed to increase the efficiency of the working operations

¹¹ *Action on Hoover Commission Reports, Report of the Committee on Expenditures in the Executive Departments* (Washington, DC: US Government Printing Office, 1950), pp 10, 13, 72, 91.

¹² *Senate Action On Hoover Commission Reports, Report of the Committee on Government Operations* (Washington, DC: US Government Printing Office, 1952), pg. 60.

¹³ *Reorganization Act of 1949*, 81 P.L. 109, 81 Cong. Ch 226; 63 Stat. 203; Balogh, Gisinger, and Zelikow.

¹⁴ *Reorganization Plan No. 26 of 1950*, Eff. July 31, 1950, 15 F.R. 4935, 64 Stat. 1280 (81st. Cong., 2nd Sess.).

¹⁵ Treasury Department Order No. 121, *Transfer of Functions with Respect to Distinctive Papers to the Bureau of Engraving and Printing*, July 31, 1950.

¹⁶ Press Release S-2406, *Untitled*, Treasury Department Information Service, August 1, 1950.

of the Treasury Department. He challenged the agencies' heads to look to their own organizations to find ways to cut costs, improve efficiency and render better public service. Snyder's mandate for management improvement in all Treasury offices and agencies included such modern management concepts as cash-awards-for-employees and work simplification.¹⁷

The Secretary encouraged the agency heads repeatedly to find ways to become more efficient, reduce costs, and reduce the size of their agencies' operations. Over the next several decades, Treasury's Management Improvement Program would become perhaps one of the most driving forces for change at the Bureau of Engraving and Printing.

The Korean War, which began in 1950, briefly slowed the overall effort at Government reform and, just as the conflict ended in 1953, Congress would form a Second Commission on the Organization of the Executive Branch of the Government. The second Commission's authorities were broader than the first and, in addition to focusing on economy and efficiency, included "a mandate to recommend the elimination of nonessential services and activities competitive with private enterprise."¹⁸

The combined pressures of the Treasury Secretary's management improvement program and the work of the two Hoover Commissions kept Bureau executives and managers in constant perturbation. Expenditures were reviewed; work methods and processes studied; forms and procedures updated, eliminated, or clarified; files and records management plans instituted; surveys and audits conducted; equipment and spaces modified; committees formed; and, inevitably, voluminous reports were filed. So much time was spent in preparing reports about management improvement activities that it is hard to imagine how the improvements themselves were ever made.

Personnel Matters

The message being transmitted, loud and clear then—to the Bureau and every other Federal agency—was that they needed to find ways to become more efficient with lower budgets and less personnel. The Bureau was taking steps to do this. More efficient operations would mean reduction in programs and switching to new, faster technologies would mean fewer personnel. And, ultimately, all this would mean an unprecedented reduction in force.

¹⁷ *Annual Report of the Secretary of the Treasury on the State of the Finances* (Washington, DC: US Government Printing Office, 1949), pg. 35. (Hereafter cited as *Secretary's Report*.)

¹⁸ "Commissions on the Organization of the Executive Branch, Scope and Content Note Regarding President Herbert Hoover's Personal Papers at the Hoover Presidential Library," www.ecommcode2.com/hoover/research/hooverpapers/hoover/postpres/hpphcom1.htm; "National Affairs: End of a Mission," *Time Magazine*, July 11, 1955. TIME Magazine Archive: time-proxy.yaga.com/time/archive/printout/0,23657,807314,00.html.

In February 1946, the President ended emergency employment under war service and temporary appointments and ordered a return, "as rapidly as...resources permit," to filling positions through competitive civil service examinations.¹⁹ The Bureau's numbers, which had peaked above 8000 in 1943, stood at about 6300 in June of 1946 and remained about the same through 1950²⁰ primarily due to orders for currency to replace worn out notes.²¹ Nevertheless, Bureau employees were affected by the return to competitive hiring and by presidential orders designed to improve and streamline the Government workforce. And while, at first, the numbers changed little, the status of employees did.

Temporary and war service employees found themselves in a difficult spot; they had the training, but no longer the seniority. Civil Service exams were set up for plate printers and assistants; veterans were given preference, others that did not pass or did not take exam were displaced. Prospective and permanent employees, after 1947, were also required to undergo loyalty investigations in order to retain permanent positions.²²

Whenever possible, positions for displaced employees were found at the Bureau in lower-paying jobs, but personnel with no status were the first to lose their jobs.²³ This situation caused resentment and strife. Employees were dissatisfied, among them, African-Americans, who picketed for fair treatment, equal access to jobs, and equal working conditions.²⁴ Labor unions supported their cause and the cause of other displaced employees.²⁵ To help resolve conflicts, the Bureau created an Office of Industrial Relations in 1948.²⁶

But, in 1951, with the installation of Phase I technological improvements effected under the modernization program and the economies effected under the management improvement program, the Bureau's workforce began to drastically

¹⁹ Executive Order 9691, *Directing the Civil Service Commission to Resume Operations under the Civil Service Rules, and Authorizing the Adoption of Special Regulations During the Transitional Period*, February 4, 1946.

²⁰ *Directors' Reports*, 1946-1950.

²¹ *Director's Report*, 1949, pg. 3; "6000 on Overtime Making New Bills," *New York Times*, May 4, 1949.

²² Executive Order 9300, *Establishing the Interdepartmental Committee to Consider Cases of Subversive Activity on the Part of Federal Employees*, February 5th, 1943; Executive Order 9835, *Prescribing Procedures for the Administration of an Employees Loyalty Program in the Executive Branch of the Government*, March 21, 1947.

²³ BEP Bulletin No. 790, *Conversion or Displacement of War Service and Temporary Tissue Separators, Printer's Assistants and Operatives*, August 5, 1949; Jerry Klutz, "The Federal Diary," *The Washington Post*, August 17, 1948, pg. B1; *Director's Report*, 1950.

²⁴ "Picket Line Protests 'Bias' at Engraving," *The Washington Post*, June 20, 1949, pg. B2; Protest flier, *Untitled*, Entry 12, Box 323: United. Fed. Workers, 1949, folder, Records of the BEP, Record Group 318, National Archives at College Park.

²⁵ Protest Fliers, *Untitled*, Undated, Entry 12, Box 323: United. Fed. Workers, 1949, folder, Records of the BEP, Record Group 318, National Archives at College Park.

²⁶ *Director's Report*, 1949, pg. 3.

decline. Between the end of fiscal years 1950 and 1955, the number of employees on the roles dropped from 6,247 to 4,005.²⁷

Technology and Change

Despite these upheavals, by the end of 1953, good things had been happening technologically at the Bureau of Engraving and Printing, and a major transition-point was about to be reached.

On June 23, 1948, the Bureau awarded a contract to the Huck Company, Incorporated, of New York, for the manufacture of an experimental bi-color rotary web-fed press for postage stamps. This press was acquired for use in developing replacements for the 30-year-old Stickney rotary web presses and it would turn out to be worth its weight in gold to the Bureau. Over the next few years, it would be used to test nearly every aspect of the new processes under consideration for both currency and postage stamps: wet and dry printing, two consecutive intaglio printings on the same web (two colors), uniform gumming and wetting, and inks and ink-wiper mechanisms, various kinds of plates, and printing rollers.²⁸

A Post Office Department press release, in announcing the issuance of the first bi-color rotary postage stamp in 1952, gives us even more insight:

*The press is equipped with electronic controls to insure accurate registration of the printed images, and has automatic temperature and constant tension controls. In addition, the latest safety devices for maximum protections to the printer, the installation of modern machinery for reduction of noise, vibration and excessive temperatures in the surrounding work areas, and a new and improved means of applying gum to the stamps have been incorporated into the design. The increased speed of the press made it necessary...to develop quick-drying printing inks.*²⁹

As intended in Phase I of the Bureau's modernization program, improvements were being made to the flatbed press production as well. By the end of fiscal year 1952, the Bureau had begun changing production of currency from 12- to 18-subject sheets, "as an interim measure to realize immediate savings until such time as developmental work can be completed on new types of printing equipment."³⁰ And by June of 1953, nonoffsetting green and black inks had been developed, specialized feeders and take-off devices were being added to the flatbed presses,

²⁷ *Director's Report*, 1950, pg 3; *Secretary's Report*, 1949, pg. 667.

²⁸ Baxter, pg 163-164.

²⁹ Press Release No. 849, *International Red Cross Commemorative 3-cent Stamp To Be Issued In Two Colors, and Printed On Newly Developed Multi-color Rotary Press*, Post Office Department (POD) Information Service, October 29, 1952.

³⁰ *BEP, Report of Activities, December 22, 1924 to December 1, 1952* (Washington, DC: BEP), pg 15.

and specialized wiping paper was procured for use in connection with the nonoffsetting inks.³¹

Simultaneous to the modifications being made to the flatbed presses, the Bureau's engineers had developed specifications for an experimental *sheet-fed* intaglio press for dry printing that was delivered by the Miehle Printing Press and Manufacturing Company toward the end of fiscal year 1953. The press was designed to investigate the possibility of rotary intaglio printing of currency and bonds.³² Despite this announced intent, it would eventually become clear that the Bureau believed the press to have potential for postage stamp production as well. If the understanding was that dry printing was essential to high speed multicolor production, then perhaps this press could provide one of the ways to get there.

Even so, Bureau engineers continued to explore production methods other than intaglio printing.

The 8c Liberty

On September 29, 1953, Bureau Director Alvin Hall submitted preliminary sketches for an 8c U.S. ordinary stamp to Post Office Department personnel. Over the next few months more sketches and then models would follow.³³ Nothing in the accompanying letters from Hall indicated anything other than routine. But, what was taking place at the Bureau was far from routine. The Bureau, by this time, knew that it would be using this particular stamp as a test case for new production methods. And the first trial method must have been already underway when the design was finally approved on November 27, 1953.³⁴

What was afoot is revealed in a letter from Assistant Postmaster General Albert Robertson to the Bureau Director dated November 24, 1953:

*The multi-color specimens which you did of the Statue of Liberty design for an 8-cent postage stamp were not very satisfactory. It is understood that these specimens were produced by the offset method of printing.*³⁵

³¹ BEP Document, "Significant Dates Relating to Adoption of Major Technological Improvements, Currency and Bonds," Undated. Equipment Files: Historical Resource Center, BEP Records (Hereafter cited as HRC Records); *Director's Report*, 1953, pg. 4, 71.

³² *Reports of Divisional Heads to the Director*, (Washington, DC: BEP, 1953), pg. 57.

³³ *Stamp History, Engraving Division Card, 8c United States Ordinary Postage Stamp, 1954*, Folder: Postage Stamp Envelope PS502. HRC Records (Hereafter cited as *Stamp History Card, 8c Ordinary, 1954*); A. W. Hall, Director, BEP, Letter to Albert J. Robertson, Assistant Postmaster General, POD, October 27, 1953. Folder: Postage Stamps: Multicolor, HRC Records; Hall, Letter to Robertson, November 5, 1953. Folder: Postage Stamps: Multicolor, HRC Records; Hall, Letter to Robertson, Assistant Postmaster General, POD, November 17, 1953. Folder: Postage Stamps: Multicolor, HRC Records.

³⁴ *Stamp History Card, 8c Ordinary, 1954*.

³⁵ Albert J. Robertson, Assistant Postmaster General, POD, Letter to Alvin W. Hall, Director, BEP, November 24, 1953. Folder: PS Experimental, HRC Records.

Little more than a few pieces of correspondence remains in the Bureau's files of this brief and unsuccessful offset experiment, but it is clear that the agency was doing its best to make its customer happy. A second, even more enigmatic indication of this effort is found on a miscellaneous die card in the Bureau's files. A description of the die, begun on December 18, 1953, reads, "'Experimental' – 'Liberty' (for experimental plates, Bi-color Rotary Web-fed press.) 3 subject[s]."³⁶ There are no other records in the Bureau's files for the 8c Liberty stamp to explain what was done with this die or whether any work on the bi-color rotary press was ever run. Perhaps nothing came of it, and, as more changes were in the works, perhaps no further consideration was needed.

In his previously-mentioned letter of November 24 to Hall rejecting the offset prints, Robertson had gone on to say:

We are anxious to make our stamps more colorful if at all possible. It will be appreciated, therefore, if you will contact suitable printing establishments and secure multicolor specimens of the stamp design submitted with this letter. It will be desirable to have the cost per thousand for procuring these stamps.

*It is also desirable that a master die be made of this design so that a comparison may be made between the design produced by the engraving method and the one produced by the other method.*³⁷

In this case, what he was really asking for was *gravure*. On December 15, Director Hall, at Associate Director Holtzclaw's suggestion, and with the concurrence of the Post Office Department, contacted Eureka Specialty Printing Company in Scranton, Pennsylvania, "for the purpose of making proofs by the Roto Gravure process."³⁸

The Elephant in the Room

While much discussion of the move to multicolor seems to have taken place within the confines of the Bureau and the Post Office Department, and, separately, among the philatelic collectors, neither Government agency seems to have ever formally spoken to collectors of the experiments into multicolor that had been taking place at the Bureau. But, everything changed on December 22, 1953, when Postmaster General Arthur E. Summerfield announced that he had "ordered a study into the possibility of replacing the 'expensive' hand engraving process now used to print postage stamps." The press release explained that offset or rotogravure methods would permit production of more artistic, colorful, and attractive postage stamps and he underscored the possibility by saying that

³⁶ *Stamp History Card, 8c Ordinary, 1954.*

³⁷ Albert J. Robertson, Assistant Postmaster General, Letter to Alvin W. Hall, Director, BEP, November 24, 1953. Folder: PS Experimental, HRC Records.

³⁸ "Memorandum for Files," "Approved H. J. Holtzclaw, AWH", December 15, 1953. Folder: PS Experimental, HRC Records.

production would begin with 1c, 2c, and 3c stamps—these providing lower returns to counterfeiters. That same day the Bureau also released information that it had received sample stamps printed by the gravure process from a private Pennsylvania firm and that the Post Office Department had authorized the stamps to be printed by the “conventional” and the rotogravure process as a “pilot test.”³⁹

So, there it was...the possibility was finally real, brought home by the Bureau’s simultaneous announcement that offset printing of savings bonds had begun on that very same day.⁴⁰

Perhaps predictably, the reaction to a change in printing methods was immediate. The Washington Plate Printers Union, in reacting to the announcement of the possible change in postage stamp printing, said that “economy” was the real reason behind the change to offset production and objected to the new method on the grounds that the stamps would be vulnerable to counterfeiting and that some union members would lose their jobs. The Bureau’s Associate Director, Henry J. Holtzclaw, agreed that a switch in production methods would mean “significant” savings to the Government and admitted that plate printing provided “the greatest protection against counterfeiting.” But he also questioned whether anyone would “seriously try to produce fake stamps if an alternative printing process were finally adopted.”⁴¹

The Government Employee Council, affiliated with the AFL, charged in a resolution adopted by the organization that the Bureau has “pursued ‘depression-promoting’ personnel policies” and one of the group’s members accused the agency of “contracting for a substantial volume of work by outside firms.” To this, the Bureau responded that no contracting work was being done that had not traditionally been done that way. The Bureau argued that the reductions in force were necessary since, by law, the work of printing securities must be done “as cheaply, as perfectly, and as safely as could be by private industry” and that the agency “cannot keep employees for whom there is no work.”⁴²

Reports of stamp collectors’ reactions seem to put them all across the board. According to one philatelic reporter, stamp collectors were said to be “withholding

³⁹ Press Release No. 2007, *Untitled*, POD Information Service, December 22, 1953; “Workers Hit Offset Plan for Stamps,” *The Washington Post*, December 23, 1953, pg. B10; “Risk of Counterfeit in Printing Bonds May Extend to Stamps,” *The Evening Star* (Washington, DC), December 23, 1953. Transcription in BEP History files: HRC Records; and Franklin R. Bruns, Jr., “U.S. Studies Plan to Make More Attractive Stamps,” *The Washington Post*, December 27, 1953, pg. B10.

⁴⁰ “Risk of Counterfeit in Printing Bonds May Extend to Stamps,” *The Evening Star* (Washington, DC), December 23, 1953. Transcription in BEP History files: HRC Records.

⁴¹ “Workers Hit Offset Plan for Stamps,” *The Washington Post*, December 23, 1953, pg. 29.

⁴² “Engraving Bureau Hit By Union On Layoffs, AFL Council’s Protest Slated for Presentation to White House,” *The Washington Post and Times Herald*, November 12, 1954, pg 1.

judgment," recognizing that "the world-wide trend today is toward gravure methods of stamp printing."⁴³ Another reported, in a fit of philatelic hyperbole:

Not since the appearance of the famous Roosevelt-Farley imperforates of 1933-4 has the philatelic world been so disturbed as it is now by the disclosure made...that postage stamps are to be printed by offset. The news created a sensation in official circles and its reverberations have rolled back in a tidal wave of protest from collectors of all grades and classes.

...The major result of Postmaster General Summerfield's publicity release was to stir up a storm of indignation involving individual citizens and groups who never before have been concerned about anything philatelic.

..The National Federation of Stamps Clubs took the whole subject under consideration and it was indicated that another national stamp conference along the lines of that staged in Washington in 1937 may be called for round table discussion of all points at issue between philatelists and the Government.⁴⁴

In January 1954, despite reports that the Post Office Department might be granting a contract to Eureka Specialty Printing to produce the regular stamps for the upcoming year,⁴⁵ other private printing firms began offering their services for producing multicolor postage stamps. While the Bureau's Director turned down some of the offers saying that a private commercial firm "had prepared certain gravure proofs in accordance with our instructions,"⁴⁶ he nevertheless had opened a dialogue with several other firms for further gravure tests.

In one case, correspondence reveals that the interaction between the Bureau and the printing company had progressed far enough for Holtzclaw to send specifications and artwork and for the firm to produce "flexichromes made with several color combinations." By March 11, Holtzclaw was anticipating hearing about "the progress you are making in connection with the proposition of submitting proofs which would be representative of postage stamps produced in multicolor." He went on, "when you have progressed to the point where you would like to submit the specimens of your work, I should be very glad to have you again

⁴³ Franklin R. Bruns, Jr., "The Philatelist; Stamp Program Waiting on Printing Test," *The Washington Post*, January 24, 1954, pg. L3.

⁴⁴ James Waldo Fawcett, "Philatelic News, Stamp World is Rocked by Disclosure of Offset Project," *The Evening Star* (Washington, DC), December 27, 1953. Transcription in BEP History files: HRC Records.

⁴⁵ *Ibid*; Franklin R. Bruns, Jr., "The Philatelist; New Stamp Method Deserves a Test," *The Washington Post*, January 3, 1954, pg. B12.

⁴⁶ A. W. Hall, Director, BEP, Letter to Timsons Limited, London, January 29, 1954; H. J. Holtzclaw, Associate Director, BEP, Letter to Henry P. Korn, New York, March 2, 1954; Hall, Letter to Ted Fleming, Fleming-Potter Company, Inc., Peoria, March 19, 1954. All located in Folder: Postage Stamps Props. Asked, 1954, HRC Records.

visit with us for that purpose."⁴⁷ Sadly, no further correspondence remains to tell us how far this particular experiment progressed. A few other tantalizing documents in the Bureau's files hint that some gravure testing by private firms continued well after the conclusion, and ultimate rejection, of Eureka's initial experiment⁴⁸ but nothing more is available on the outcome of these either.

Obviously, the Bureau was trying more than one approach to meeting the requests of the Post Office Department to produce more colorful stamps, including finding some way to do this multicolor work in its own facility. In one letter, Director Hall stated, "insofar as possible, the equipment and techniques available in this bureau are being utilized."⁴⁹

Indeed, experimental work at the Bureau had continued to progress. On March 7, 1954, it was announced that the Eureka gravure press run was "not satisfactory." Instead, "the new bi-colored 8-cent stamp [would] be printed on a dry pregummed paper, a procedure never before followed by the Bureau."⁵⁰ Intaglio plates for the four-plate flatbed press and the Miehle sheet-fed rotary press were certified for production in late February and early March⁵¹ and production took place in the research section of the Bureau under strictly limited access.⁵² Ultimately, both rotary and flatbed stamps were deemed acceptable and on April 3, 1954, the first of the completed stamps were issued.

Conclusion

The story of the 8c Liberty epitomizes the transition from the "outmoded equipment"⁵³ of the post-war Bureau of Engraving and Printing to the production methods of the modern era. The stamp marked the transition from wet printing to dry printing, single color to multicolor.

⁴⁷ Correspondence between H. J. Holtzclaw, Associate Director, BEP, and C. J. Murray, General Manager, Triangle Publications-Gravure Division, February 18, 1954 to March 11, 1954. Folder: Postage Stamps Props. Asked, 1954, HRC Records; Correspondence between H. J. Holtzclaw, and George D. Beck, President, The Beck Engraving Company. Folder: Postage Stamps Props. Asked, 1954, HRC Records.

⁴⁸ Memorandum concerning experimental printing of two 3c stamps, E. G. Shreve, Chief, Office of Planning, BEP, to G. S. Dorey, Orders Section Officer, BEP, July 12, 1954; Memorandum concerning a 50-subject experimental commemorative printed by Eureka Specialty Printing Company; Shreve, to Dorey, August 10, 1954; Shipping Instruction Form for shipping paper to the Beck Engraving Company, Inc., September 29, 1954. All located in Folder: P. S. Experimental, 1954, HRC Records.

⁴⁹ H. J. Holtzclaw, Associate Director, BEP, Letter to Henry P. Korn, New York, March 2, 1954. Folder: Postage Stamps Props. Asked, 1954, HRC Records.

⁵⁰ Franklin R. Bruns, "The Philatelist; Various Stamp Production Methods Being Considered," *The Washington Post*, March 7, 1954, pg. L3.

⁵¹ *Stamp History Card, 8c Ordinary, 1954.*

⁵² E. Krom, Acting Chief, Office of Planning, BEP, Memorandum to M. J. Donovan, Chief, Office of Administrative Services, BEP, February 26, 1954. Folder: Postage Stamps: Multicolor, HRC Records.

⁵³ *BEP, Report of Activities, December 22, 1924 to December 1, 1952*, pg 12, BEP History files: HRC Records.

In 1955, George Brett took a moment to describe what was happening, "All of this of course means that a revolution in stamp production is taking place at the Bureau and that there have been and will continue to be a number of things for noting until matters have settled down in connection with the new means and method of manufacture."⁵⁴ And, with this single understated sentence, Brett—who closely followed the operations of the Bureau of Engraving and Printing for over 60 years and often seemed to love the agency better than the employees themselves—summed up not only the unsettled conditions of the era but also the amazing advances in technology that were taking place at the Government's security printer.

Postscript

On March 10, 1954, three days after the announced rejection of the Eureka gravure stamps, Associate Director Holtzclaw began discussions for procuring a "De La Rue direct plate [intaglio] press." "The Bureau has a vital interest," Holtzclaw would explain, "in any new and improved printing equipment which may be adaptable for production of United States currency, stamps, and various securities."⁵⁵ By early 1955, the newly-appointed *Director* Holtzclaw would negotiate an agreement with the Thomas De La Rue Co, Ltd. as well as the Giori Organization, both European firms, to bring their experimental sheet-fed rotary presses into the Bureau for testing. Ultimately, both would find a home there, one for currency and one for multicolor printing of postage stamps. Two years later, the Bureau would print its first truly-multicolor postage stamp.

⁵⁴ George W. Brett, "Differentiating the Dry and Wet Printed Line-engraved Product of the Bureau of Engraving and Printing," *The Bureau Specialist*, November 1955, pg. 321.

⁵⁵ H. J. Holtzclaw, Associate Director, BEP, Letter to B. C. Westall, March 10, 1954. Folder: Postage Stamps Props. Asked, 1954, HRC Records.