

UNITED STATES COPYRIGHT OFFICE
LIBRARY OF CONGRESS

Secure Test

37 CFR Part 202

[Docket 2017-8]

The Association of Test Publishers (“ATP”) welcomes this latest opportunity to submit comments on the issues raised in the above Docket. The ATP is the international trade association comprised of hundreds of publishers, sponsors, and vendors that deliver and administer tests and other testing services, used in various settings (including employment, education, clinical psychology, and certification/licensure/credentialing), many of whom use secure tests and register them with the Copyright Office under the Secure Test procedures (“ATP Members”). The ATP has commented on the previous Interim Rule in the Docket. *See* ATP Comments, filed on April 2, 2018.

On May 8, the Copyright Office issued a Notice, without providing the opportunity for Notice and Comment, amending to its previous 2017 Interim Rule in the above Docket (originally issued June 12, 2017, and modified on November 13, 2017), covering registration of copyright claims in secure tests in order to address a disruption caused by the COVID–19 pandemic. *See* 85 *Fed. Reg.* 27,296 (May 8, 2020) (“2020 Interim Rule”).

In the May 8 Notice, the Office announced that “otherwise-eligible tests that are administered online during the national emergency may qualify as secure tests, provided the test administrator employs sufficient security measures.” *Id.* at 27,297. In addition, the Office requested public comment on what technological requirements should be implemented for examination of secure test application claims via secure teleconference. Finally, the Notice stated that the Office intends to issue guidelines addressing which parties may request ex parte meetings with the Office in this proceeding and how such meetings will take place. These comments are being submitted by the ATP by the due date of June 8, 2020.

The ATP urges the Copyright Office to clarify the definition of “secure test” under the Interim Rule and make it permanent. The testing industry effectively uses online supervised tests scheduled on demand today, which activity is not affected by COVID-19. Thus, the same procedures approved in the 2020 Interim Rule are appropriate for future use regardless of the end of the “national emergency.” The ATP also encourages the Copyright Office to adopt appropriate technical requirements to ensure the security of the examination process for secure tests. Finally, the ATP requests the opportunity to continue to participate in *ex parte* meetings on these issues.

Background

The “secure test” registration process has been in place since 1978, adopted as part of the regulations implementing the Copyright Act of 1976.¹ The testing industry has relied on those regulations for nearly four decades. Indeed, those regulations functioned smoothly, even as technological changes were made in the way many tests are delivered (*see* 82 *Fed. Reg.* at 26851). As technology changed, the Office adjusted its original registration procedure “to permit secure registration of tests administered in a machine-readable format and secure tests administered with physical booklets containing questions taken from an automated database” (*see* Updated Notice at 52,225), thereby facilitating the ongoing protection of secure test materials long recognized as warranting treatment by the Office equivalent to paper-and-pencil tests. The Office used its updated secure test registration procedures for more than 20 years, well **after** the advent of computerized testing.

Despite that history, in June 2017, the Office issued an Interim Rule that, among other impacts, revoked the right of testing industry members to seek copyright protection for automated databases (i.e., “item banks”) – pools of items carefully developed using full psychometric rigor, from which specific secure test forms in various formats are built for delivery by computer (e.g., CBT, CAT, LOFT,

¹ See 42 *Fed. Reg.* 59302, 59304 & n.1 (Nov. 16, 1977), which went into effect in 1978 (the “1978 regulations”). That Notice relied upon communications from many testing organizations that are now members of the ATP (e.g., ETS, ACT, The College Board), although the ATP did not exist at that time.

CMA).² The June 2017 Interim Rule also expressly stated that tests administered remotely or outside a “specified center” would not be considered “secure tests.” Following meetings with the industry and other interested parties, the Office modified its original Interim Rule clarifying that test items stored in electronic databases could, in fact, be registered and creating a “group registration” process for secure tests. The Office did not change its position regarding remotely administered tests, however. While it retained the current definition of “secure test” for the 2017 Interim Rule, the Office informally stated in November 2017 that it intended to issue a Notice of Proposed Rulemaking to change the definition of “secure test,” during the first quarter of 2018. To date, however, despite the passage of more than two years, no such NPRM has been issued by the Office. Accordingly, the original 1978 definition of “secure test” remains in force today.

The 1978 regulations define a “secure test” as “a nonmarketed test administered under

² Derived secure test formats/forms include tests where the computer version always contains the same test items (Computer-Based Testing or “CBT”), where items may vary between different test takers but the test forms are equivalent (Computer-Adaptive Testing or “CAT”), linear-on-the-fly testing (“LOFT”), which constructs a unique test for each test taker from a large pool of items; and computer mastery testing (“CMT”), which curtails test administration once the test taker demonstrates content mastery or lack thereof. As the ATP noted in its April 208 comments, the definition of “secure test” should include individual secure test forms that are separate compilations of secure test items derived from a single item bank of secure test items. All of these test types qualify for use as secure tests and all of them apply the same psychometric principles (i.e., science-based psychometric validity, reliability, fairness and legal defensibility), designed to protect test content for unauthorized access and/or exposure. Compilation of test items within a specific form is equally an element of the creative psychometric scientific process – a test form as a creative work is NOT remotely akin to merely compiling content (e.g., telephone numbers into a directory). In this vein, since 2018, the ATP has asserted that it is appropriate to register an individual test form (or multiple forms drawn from a single item bank or pool of items) based on the “selection, coordination, or arrangement” of the items in the test form applying identical psychometric principles to paper fixed form tests. Indeed, the particular combination of items into a test form should be (and almost always is) based on the application of psychometric/scientific principles to ensure that a test form is valid, (Continuation of fn. 2) reliable, and fair to every test taker taking that test form, as well as to ensure that scores on different forms intended to measure the same content can be compared with one another.

supervision at specified centers on specific dates, all copies of which are accounted for and either destroyed or returned to restricted locked storage following each administration. For these purposes, a test is not marketed if copies are not sold but it is distributed and used in such a manner that ownership and control of copies remain with the test sponsor or publisher.” 37 CFR 202.20(b)(4). *See* 42 *Fed. Reg.* 59,302, 59,304 & n.1 (Nov. 16, 1977). As the Office acknowledged back in 1977, the secure test process was “intended to protect the confidential nature of these works” and was intended to “best identify the kinds of tests that raised special confidentiality concerns.” Further, the Office itself observed that retention of an archival copy of a secure test and making it available for public inspection “could severely prejudice the future utility, quality, and integrity of the materials.” *Id.* As the ATP demonstrated in its 2018 Comments, nothing about computer-based or any other technology-based assessment has changed those basic principles as supporting reasons for the secure test procedure.

Against this backdrop, when the COVID-19 pandemic hit, with social distancing requirements and “stay-at-home” orders, many organizations are no longer able to administer secure tests (e.g., school admissions testing, employment tests, certification/licensure tests) to test takers in person in a physical testing locations (e.g., test center, school), and instead, have been forced to conduct online testing remotely, with test takers at home.

I. The 2020 Interim Rule Should be Clarified and Made Permanent

The May 8 Notice states that the modified Interim Rule “provides that an otherwise-qualifying test shall be considered a secure test if it normally is administered at specified centers but is being administered online during the national emergency, provided the test administrator employs measures to maintain the security and integrity of the test that it reasonably determines to be substantially equivalent to the security and integrity provided by in-person proctors.” 85 *Fed. Reg.* at 27,298. The Notice goes on to state that test publishers “generally should have flexibility to tailor appropriate security measures to their specific needs.” As examples, the Office mentioned “some combination of video monitoring and/or recording, the disabling of certain functions on test-takers’ computers (e.g., copying and pasting), technological measures to prevent access to external websites and other prohibited materials, and identity

verification of the individual taking the test.” *Id.* Additionally, the Notice explains that the 2020 Interim Rule retains the requirement that a secure test must be administered “under supervision,” which means that “test proctors or the equivalent supervise the administration of the test.” *See* 37 CFR 202.13(b)(3). Finally, the May 8 Notice clarifies the definition concerning the storage of secure tests (*see* 37 CFR 202.13(b)(1)), by adding the words copies also may be returned to “secure electronic storage” so as not to preclude the retention of digital copies.

While the ATP generally applauds the direction taken by the Office, there are several serious issues raised by the 2020 Interim Rule that the Office must resolve. First, it is not at all clear when and how a testing organization is supposed to know when the “national emergency” is over. Emergencies have been declared federally³ and by almost every state (some before and some after the federal proclamation) and even a number of cities/counties, with various orders affecting how residents in the state or county are supposed to comply. Given the variations in when the emergency was declared, it is now highly unlikely that all such emergency orders will be lifted at the same time – and even if the Trump Administration would like to declare that the emergency is over, that declaration is unlikely to be joined or implemented by every state and locality. Since remote testing with supervision occurs in almost every state, and often occurs in multiple at-home locations within each state during the same testing window, it is virtually impossible to say the impacts of COVID-19 will have ended in the United States as of any precise date certain. Accordingly, the Office should clarify the 2020 Interim Rule to allow its use so long as the secure test applicant can demonstrate that it is conducting online/remote testing because of the virus interruption.

Even more critically, however, as the Office recognized in the Notice, several commenters in this Docket from 2018, including the ATP, previously have pointed out that existing testing technology already supports the identical testing outcomes provided in the May 8 Notice. Thus, the attempt to limit the Interim Rule to tests that were “formerly conducted in person” fails to recognize that there is

³ The Secretary of Health and Human Services (HHS) declared a public health emergency on January 31, 2020, under section 319 of the Public Health Service Act (42 U.S.C. 247d), in response to COVID-19. President Trump’s Proclamation was dated March 13, but was retroactive to March 1, 2020. Dates for state emergency actions run from February 29 (Washington State) to May 2 (Connecticut).

absolutely NO difference between at-home/remote proctored testing because of COVID-19 – the very same type of testing occurring on a daily basis before COVID-19, and that will continue to occur in exactly the same manner following a time when in-person testing may resume. Similarly, there is no basis for requiring users of the 2020 Interim Rule to “return” to in-person testing upon the end of the national emergency (which as noted above, cannot be determined with certainty).

Accordingly, the ATP strongly encourages the Office to make the 2020 Interim Rule permanent, as modified by these comments, regardless of the extent and duration of the “national emergency.” An analysis of the definition of “secure test” reveals why that result is appropriate under the technologies in place today. There is no reason for the Office to require the testing industry to act as though testing exists in the 1970s by continuing to rely on an outdated definition – a definition that the Office itself informally modified during the 1990s. The time has come for the Office to join the 21st Century and allow already-implemented technology-based assessments to be equally protected under the Copyright Act.

In the May 8 Notice, the Office recognizes that the “specified centers” limitation was a concern for many test publishers even before the emergency, with several commenters in this proceeding urging the Office to amend that language to facilitate a broader range of testing models. The Notice states that, “The Office therefore will monitor the operation of the interim rule to help it evaluate whether and under what conditions remote testing should be permitted under the secure test regulations once the emergency period ends.”

Regardless of COVID-19 or not, in today’s testing environment, remote “supervision” of test takers is routinely accomplished for online testing, whether the test is delivered in person or remotely. The development of secure computerized test delivery and remote online proctoring allows supervision of test takers both at physical test sites (i.e., test centers) and at other locations (e.g., home, school, business). Indeed, supervision can take many forms. It is possible to “lock down” a computer so it has no access to the Internet and, thus, the test taker has no opportunity to go online to access materials or obtain answers. Similarly, keystroke logging, digital video recording, laptop cameras, and other forensic analytical AI technology, are being successfully used to maintain a secure test environment and monitor a test taker

online in real time during the test administration, or subsequently after the test administration, to ensure that no cheating is taking place, while at the same time providing greater convenience and flexibility for the test taker.

Consequently, since appropriate secure test supervision can be achieved remotely, there is no need to require that a secure test be administered in a “specified center.” It is now possible for a secure test to be administered without the use of a physical location and without requiring all test takers to “assemble” in one place. In fact, it is common practice today for a single test taker to report to a third-party test location. Indeed, many secure tests in the employment setting are administered “at the office” under the supervision of the HR department or similar personnel. Ironically, the ATP notes that the 1978 definition does not specify what type of center is required; many different secure tests, especially in the certification/licensure area and/or personnel testing, are routinely administered to test takers at home or at work (but not in a specified center).

Moreover, these “old process” requirements clearly conflict with the actual language of the 1978 regulations, which does not use the term “scheduled dates” at all, but instead only requires that a test “be administered under supervision at specified centers on specific dates.” Thus, a test administration may be “scheduled” or allowed to begin with the permission of the test sponsor/test administrator, without regard for whether the schedule is fixed for all test takers or is fixed by the individual **test taker (i.e., on-demand testing)**. Many test sponsors allow candidates/examinees to take tests at times of their choosing as a matter of convenience for individual test takers (e.g. because of travel issues or disabilities). Whether the test is taken “on demand” or within some approved testing window, it is essentially considered to be “scheduled” by testing organizations and/or their test delivery vendors – just as is happening under the 2020 Interim Rule.

Similarly, as the 2020 Interim Rule demonstrates, there is no reason to distinguish between physical and digital storage; both approaches are equally capable of providing the required security for test items, forms, and tests. In fact, in many circumstances, it is probable that some form of digital storage (i.e., encryption) provides greater security than physical storage – if the physical storage is

breached, the actual test in readable form is obtained, but if the encrypted digital storage is hacked, the file cannot be decrypted and read without the key. To deny copyright protection to testing organizations using modern storage techniques, while permitting the same content to be registered if “old school” physical store is employed, is simply mind-boggling.⁴ While the Copyright Office appears to recognize this reality, following input from members of the testing industry over the last few years, the protections for testing programs using modern, electronic data storage and test administration should be memorialized in an updated “secure test” definition as soon as possible.

Further, because current digital/remote assessment technology is fully capable of meeting the requirements of the definition of “secure test,” it will continue to exist even if the COVID-19 pandemic is brought under control and society returns to some availability of “in-person” testing.⁵ The ATP is of the opinion that many testing organizations and users of tests, having spent money and effort to move to remote online testing/proctoring, are likely to stay with those technologies.⁶ The ATP firmly believes that the Office’s experience under the 2020 Interim Rule will bear out the sensibility that secure test applicants are entitled to have online at-home tests and remotely-administered and proctored test items be eligible for registration and testing programs should have the option of using these online/remote procedures for all future applications.⁷

⁴ The “distribution and use” of computer-based tests is not different from paper-based tests and still entails procedures that enable “ownership and control of copies [to] remain with the test sponsor or publisher.” Similar to physical versus digital storage, the distribution and use of a digital test provides full control or the content owner to protect the test, as well as the items, from disclosure, whether such distribution and use is via the Internet or by means of a USB, flash drive, or other mechanism.

⁵ The ATP submits that this situation is no different than the evolution of section 110 of the Copyright Act (17 U.S.C. §110) to permit registration of works in remote face-to-face educational instruction, the secure test registration procedure appropriately should evolve to reflect the changes that digital technology has brought to secure tests.

⁶ The ATP strongly recommends that the Office update the definition of “secure test” to avoid confusion and to recognize the technologic improvements present in today’s testing environment so that ATP Members can better protect their valuable intellectual property.

⁷ The Office’s “Questionnaire for Secure Tests and Questions, Answers, and Other Items Prepared for Use in Secure Tests,” currently is based on the existing definition of “secure test” and thus would need to be revised to address the future registration eligibility of remote or online proctored, online at-home tests/test items.

Based on the above concepts, the ATP proposes adoption of the following definition of “secure test”:

A “**secure test**” is a non-marketed test comprised of a group of secure test questions and answer choices (“items”) that are contained in a fixed test form or are stored together and retrieved from a database of items to form a complete test or otherwise administered to test takers as a group of test items, created through generally-accepted industry practices to assess or measure certain content, knowledge, skill, mastery, or competency, delivered in a supervised environment either in person or remotely, all copies of which are accounted for and either destroyed/deleted or returned to restricted physical or electronic storage following each administration. For these purposes, a test is not marketed if copies are not sold but the test is administered and used in such a manner that ownership and control of physical and electronic copies remain with the test sponsor or owner, or its agents.

II. Technical Requirements for Examination of Secure Test Applications

During the COVID-19 crisis and more permanently, the Copyright Office should establish appropriate security procedures to handle registration examinations remotely via secure videoconference or other similar technology. So long as it is conducted in a way that ensures the security of test content, such an approach would make the registration process more cost-effective and efficient for both registrants and the Office. Because the security of test items is paramount, the ATP urges that Office to assure the use of secure teleconference services and that all data sharing between the Office and any applicant is securely managed, including use of at least the following measures:

- 1) All hardware and software employed by the Office on its end of the connection must comply with the NIST Federal Information Processing Standards (“FIPS”), including for defining encryption algorithms and methods for generating encryption keys. FIPS 140-2 is currently used, but on March 22, 2019, the Department of Commerce approved FIPS 140-3, *Security Requirements for Cryptographic Modules* to succeed FIPS 140-2. FIPS 140-3 became effective on September 22, 2010; however, FIPS 140-3 validation testing is not scheduled to begin until September 22, 2020. Until such testing is completed, FIPS 140-2 will coexist for some time.
- 2) Data sharing between an applicant and an Office Examiner should be secured by requiring the Office’s network servers to use certificates and by using OAuth, TLS, Secure Real-Time Transport Protocol (SRTP), and other industry-standard encryption techniques, including 256-bit Advanced Encryption Standard (AES) encryption.
- 3) The Office should carefully instruct every Examiner in the use of secure virtual meeting technologies, such as Webex, Zoom, GoToMeeting, and Microsoft Teams, to ensure that every

examination is handled in a secure manner (using only secure settings, admitting only pre-authorized individuals into a meeting, proper handling and minimal retention of any recording of a meeting). Unless the Office decides to utilize a closed system, such as Signal, the Office should provide training to each Examiner who will be handling secure test applications, since security breaches/issues on open platforms have been widely reported since COVID-19.

The major virtual meeting platforms have issued guidelines and best practices that will be helpful to the Office in meeting this requirement. A few such documents are referenced below:

- (i) Cisco Webex: <https://blog.webex.com/video-conferencing/four-key-security-features-of-cisco-webex/#:~:text=Webex%20has%20you%20covered%20with,apps%20and%20the%20Webex%20cloud.>
- (ii) Zoom 5.0: Zoom has released several updates to fix security problems and upgraded its encryption technology across the platform as of May 30, 2020, which addressed security concerns to the greatest possible extent. In addition, the following documents are helpful:
https://blog.zoom.us/wordpress/2020/04/27/its-here-5-things-to-know-about-zoom0/?zcid=3753&creative=430738469005&keyword=%2Bzoom%20%2Bsecurity&matchtype=b&network=g&device=c&gclid=Cj0KCQjw1N32BRCCARIsADZJ4sS3hKNuZ7hKJ3iSYDl63eNb5o6UVSbLDh1j_7mevgA4hCqSOA2DzsaAILoEALw_wcB
Best Practices for Zoom:
<https://zoom.us/docs/doc/Securing%20Your%20Zoom%20Meetings.pdf>
- (iii) GoToMeeting: <https://blog.gotomeeting.com/online-meeting-security-questions-answered/#:~:text=Security%20and%20Privacy%20Compliance%3A%20All,TRUSt%20Verified%20Privacy%2C%20Rich%20Based>
- (iv) Teams: <https://docs.microsoft.com/en-us/microsoftteams/teams-security-guide>.

4) The examination process should include the use of technology that will create a solid evidentiary record of the secure test examination, including certification. For example, the work product resulting from the virtual meeting should be an encrypted document issued by the Copyright Office, including the following steps:

- (i) Dual screen control. We recommend that the Copyright Office adopt technology that allows for both dual screen scrolling and the ability to delegate control of that screen.
- (ii) Dual screen scrolling will allow for examiners to view the full text of the test items next to the redacted version of the test items that were uploaded during the initial upload. Each screen will move in synchronization with the other. An example of this technology is Bluebeam.

(iii) The ability to delegate control from the registrant to the examiner will allow for a hand-off between the parties. The registrant can prepare the documents to be compared and then delegate the review of the documents to the examiner. An example of this feature is available with Skype.

(iv) In addition to screen synchronization and delegation of control, we recommend that the Office define the process for exchanging and sharing files during the appointment such as, stamped application and IBN list.

(v) At the end of the virtual meeting, the examiner would convert the Word document to a pdf document and encrypt that document with the pdf certificate functionality. The examiner would then send that document to the registrant as an official record of the items registered for copyright.

III. Request to Participate in *Ex Parte* Meetings

As the Office is well aware, the ATP has participated in three *ex parte* meetings held by the Office in this Docket. Each of those meetings was necessitated by the Office's decision not to comply with the Administrative Procedure Act in promulgating the Interim Rule, including the 2020 Interim Rule.

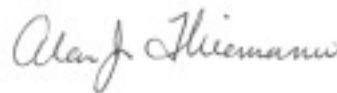
If the Office holds further meetings on these issues, the ATP requests to continue to participate in all such meetings. Indeed, the ATP is the only trade association comprised solely of testing industry members; it would defy logic to disinvite the ATP from full participation.

The ATP represents the entire testing industry as it seeks to ensure the ability of testing organizations to register test content that utilizes computer-based technologies that are designed to improve the availability, efficiency, and security of tests today. As such, the ATP is committed to providing assistance to the Office as it works through these issues, including the ability to bring together industry representatives to discuss the technical requirements for conducting remote examinations, including the presentation of live demonstrations of remote proctoring technology/solutions, if the Office would like to see such technology in use.

Respectfully submitted,



William G Harris, Ph.D.
CEO



Alan J. Thiemann
General Counsel