SECURITIES AND EXCHANGE COMMISSION (Release No. 34-79084; File No. SR-BatsBZX-2016-30)

October 12, 2016

Self-Regulatory Organizations; Bats BZX Exchange, Inc.; Order Instituting Proceedings to Determine Whether to Approve or Disapprove a Proposed Rule Change to BZX Rule 14.11(e)(4), Commodity-Based Trust Shares, to List and Trade Winklevoss Bitcoin Shares Issued by the Winklevoss Bitcoin Trust

On June 30, 2016, Bats BZX Exchange, Inc. ("BZX" or "Exchange") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")¹ and Rule 19b-4 thereunder,² a proposed rule change to list and trade Winklevoss Bitcoin Shares ("Shares") issued by the Winklevoss Bitcoin Trust ("Trust") under BZX Rule 14.11(e)(4). The proposed rule change was published for comment in the <u>Federal Register</u> on July 14, 2016.³

The Commission has received six comment letters on the proposed rule change.⁴ On

August 23, 2016, pursuant to Section 19(b)(2) of the Act,⁵ the Commission designated a longer

period within which to approve the proposed rule change, disapprove the proposed rule change,

³ See Securities Exchange Act Release No. 78262 (Jul. 8, 2016), 81 FR 45554 ("Notice").

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

⁴ See Letters from Robert D. Miller, VP Technical Services, RKL eSolutions (July 11, 2016) ("Miller Letter"); Jorge Stolfi, Full Professor, Institute of Computing UNICAMP (July 13, 2016) ("Stolfi Letter"); Guillaume Lethuillier (July 26, 2016) ("Lethuillier Letter"); Michael B. Casey (July 31, 2016) ("Casey Letter"); Erik A. Aronesty, Sr. Software Engineer, Bloomberg LP (Aug. 2, 2016) ("Aronesty Letter"); and Dan Anderson (Aug. 27, 2016) ("Anderson Letter"). All comments on the proposed rule change are available on the Commission's website at: <u>https://www.sec.gov/comments/srbatsbzx-2016-30/batsbzx201630.shtml</u>.

⁵ 15 U.S.C. 78s(b)(2).

or institute proceedings to determine whether to disapprove the proposed rule change.⁶ This order institutes proceedings under Section 19(b)(2)(B) of the Act⁷ to determine whether to approve or disapprove the proposed rule change.

I. <u>Summary of the Proposal⁸</u>

The Exchange proposes to list and trade the Shares under BZX Rule 14.11(e)(4), which

governs the listing and trading of Commodity-Based Trust Shares on the Exchange.⁹ The Shares,

which will be registered with the Commission by means of the Trust's Registration Statement,¹⁰

represent units of fractional undivided beneficial interest in and ownership of the Trust. Digital

⁶ <u>See</u> Securities Exchange Act Release No. 78653, 81 FR 59256 (Aug. 29, 2016). The Commission designated October 12, 2016, as the date by which it should approve, disapprove, or institute proceedings to determine whether to disapprove the proposed rule change.

⁷ 15 U.S.C. 78s(b)(2)(B).

⁸ The Commission notes that additional information regarding the Trust and the Shares, including investment objectives, risks, creation and redemption procedures, fees, portfolio holdings disclosure policies, calculation of NAV, distributions, and taxes, as well as additional background information about bitcoins and the Bitcoin network, including information relating to Bitcoin network operations, bitcoin transfers and transactions, cryptographic security used in the Bitcoin network, Bitcoin mining and creation of new bitcoins, the mathematically controlled supply of bitcoins, modifications to the Bitcoin protocol, among other things, can be found in the Notice (see supra note 3) and the registration statement filed with the Commission on Form S-1 (File No. 333-189752) under the Securities Act of 1933 ("Registration Statement"), as applicable.

⁹ <u>See BZX Rule 14.11(e)(4)(C) (permitting the listing and trading of "Commodity-Based</u> Trust Shares," defined as a security (a) that is issued by a trust that holds a specified commodity deposited with the trust; (b) that is issued by such Trust in a specified aggregate minimum number in return for a deposit of a quantity of the underlying commodity; and (c) that, when aggregated in the same specified minimum number, may be redeemed at a holder's request by such Trust which will deliver to the redeeming holder the quantity of the underlying commodity).

¹⁰ <u>See Registration Statement, supra</u> note 8. The Exchange states that the most recent amendment to the Registration Statement was filed on June 29, 2016, and that the Registration Statement will be effective as of the date of any offer and sale pursuant to the Registration Statement.

Asset Services, LLC will be the sponsor of the Trust ("Sponsor"). Gemini Trust Company, LLC, the custodian of the Trust ("Custodian"), will hold the deposited bitcoins on behalf of the Trust in a segregated custody account. The Exchange has represented that the Custodian will use its proprietary and patent-pending offline (i.e., air-gapped) cold-storage system to store the Trust's bitcoins.¹¹

According to the Exchange, the Trust will hold only bitcoins as an asset.¹² The investment objective of the Trust is for the Shares to track the price of bitcoins, as measured by the spot price at 4:00 p.m. Eastern time on the Gemini Exchange¹³ each day the Exchange is open for trading, minus the Trust's liabilities (which include accrued but unpaid fees and expenses). On each business day, the Trust's administrator will use the Gemini Exchange spot price as measured at 4:00 p.m. Eastern time to calculate the Trust's net asset value ("NAV").

¹¹ According to the Exchange, the Custodian is an affiliate of the Sponsor and a New York State-chartered limited liability trust company that operates under the direct supervision and regulatory authority of the New York State Department of Financial Services. The Trust's public Bitcoin addresses are established by the Custodian using its proprietary hardware and software security technology. The Trust will employ security procedures, described in greater detail in the Notice and the Registration Statement, to safeguard the bitcoin assets of the Trust. <u>See</u> Notice and Registation Statement, <u>supra</u> notes 3 and 8, respectively.

¹² As described in greater detail in the Notice and the Registration Statement, a bitcoin (with a lower case "b") is a digital asset that is based on the decentralized, open-source protocol of the peer-to-peer Bitcoin computer network. The Bitcoin network (with a capital "B") hosts the decentralized public transaction ledger, known as the "Blockchain," on which all bitcoins are recorded. <u>See</u> Notice and Registation Statement, <u>supra</u> notes 3 and 8, respectively.

¹³ The Gemini Exchange is a digital-asset exchange owned and operated by the Custodian and is an affiliate of the Sponsor.

The Trust will issue and redeem the Shares in "Baskets" only to certain Authorized Participants on an ongoing basis.¹⁴ Creation Baskets will be distributed to the Authorized Participants by the Trust in exchange for the delivery to the Trust of the appropriate number of bitcoins (i.e., bitcoins equal in value to the value of the Shares being purchased). On a redemption, the Trust will distribute bitcoins equal in value to the value of the Shares being redeemed to the redeeming Authorized Participant in exchange for the delivery to the Trust of one or more Baskets. On each business day, the value of a Basket for a creation transaction and the value of a Basket for a redemption transaction will be equal to one another (i.e., each Basket will consist of 50,000 Shares, and the value of the Basket will be equal to the value of 50,000 Shares at the NAV per Share on that day).

II. Summary of Comment Letters

The Commission has received six comment letters on the proposed rule change.¹⁵ The following is a summary of those letters.

A. <u>Timing of the Proposal and Investor Access to Bitcoin</u>

One commenter states that the proposal is a timely opportunity for the Exchange and investors, and that the proposal will allow investors to invest in the technology without having to deal with the complexity of holding bitcoins directly.¹⁶ Another commenter states that it supports the goals of the Trust and finds the proposal to be appropriate and timely, noting that Bitcoin is in a pivotal year and is maturing, and noting that the average number of daily Bitcoin

¹⁴ Each Basket will consist of 50,000 Shares, and the value of the Basket will be equal to the value of 50,000 Shares at their NAV per Share on that day.

¹⁵ <u>See supra</u> note 4 and accompanying text.

¹⁶ <u>See Miller Letter, supra</u> note 4.

transactions is currently 200,000, that more than 350,000 unique addresses are being used to hold bitcoins,¹⁷ and that the Bitcoin miners (who validate transaction blocks through computational hashes) conduct more than a billion hashes per second.¹⁸ In addition, the commenter states that, in practice, while using Bitcoin may appear complex and forbidding, based on fear of theft and concerns about legal and tax issues, among other things, the Trust can help a whole category of people to gain access, albeit indirectly, to Bitcoin.¹⁹

B. <u>Need for Additional Control and Security Measures</u>

With respect to security measures to be implemented by the Trust, one commenter recommends that additional steps mandating "proof of control" audits be employed to protect the consumers of this ETP.²⁰ Specifically, the commenter recommends a monthly "proof of control" audit of all of the Trust's bitcoins to be performed by the Custodian and provided to the Sponsor, who should display the signed messages on its website to publicly demonstrate proof of control over the bitcoins held by the Trust.²¹ According to this commenter, the message to be signed can be the mined hash of a predetermined block height, which is guaranteed to be both easily verifiable and unknown in advance,²² and the signatures can be created with the private keys still in cold storage and air-gapped.²³ This commenter notes that publicly identifying the addresses

¹⁷ Additional information about Bitcoin addresses and storage, mining, bitcoin transfers, and the Blockchain, among other things, can be found in the Notice. <u>See</u> Notice, 81 FR at 45556-45561, <u>supra</u> note 3.

¹⁸ <u>See</u> Lethuillier Letter at 1-2, <u>supra</u> note 4.

¹⁹ <u>See id.</u> at 2.

²⁰ <u>See Casey Letter, supra note 4.</u>

 $[\]underline{\text{See } id.}$ at 2.

²² See id.

²³ See id.

holding the bitcoins adds no risk to them being stolen due to the nature of Bitcoin.²⁴ According to the commenter, the bitcoins remain secure from even quantum attack as the public key is never revealed, no additional risk is incurred by publishing the proof-of-control audit, and opening control to public audit vastly increases confidence in possession and control of the underlying asset.²⁵ In addition, the commenter notes that publishing the proof-of-control audit on a monthly basis would not place an undue burden on either the Sponsor or Custodian, as less-regular audits are scheduled in any event.²⁶

Another commenter addressed proof-of-control audits, adding that, unlike with nondigital assets, an "audit" of assets in bitcoins can be low cost, public, and automated, and that there is no legitimate reason to maintain secrecy of the holdings involved in a trust or exchange.²⁷ This commenter notes that a well-managed trust should be able to trivially update its proof of assets at least once every day, if not more often (every time a bitcoin is moved or acquired).²⁸ This commenter proposes that the Commission require that any trust holding bitcoins either (i) maintain insurance on its assets, or (ii) allow for public, daily audit of funds. Without one of those two measures, the commenter states, investors in a bitcoin trust cannot be reasonably assured that their investment is being soundly custodied.²⁹ The commenter concludes

²⁴ <u>See id.</u>

²⁵ <u>See id.</u>

 $[\]frac{26}{\text{See id.}}$

²⁷ <u>See</u> Aronesty Letter, <u>supra</u> note 4.

²⁸ <u>See id.</u>

²⁹ <u>See id.</u>

by stating that, given the nature of bitcoins as electronic assets, a public and daily proof, rather than the stated provisions for private audits, should also be considered.³⁰

Another commenter states that, according to the proposed rule change, the Custodian's Cold Storage System utilizes multiple-signature ("Multisig") technology with an "M-of-N" signing design that requires a signature from more than one (1) Signer (but fewer than the full complement of potential Signers) in order to move the Trust's bitcoins.³¹ The commenter recommends amending the proposal in order to unambiguously specify the M-of-N signing design used to secure the Custodian's Cold Storage System and to require the Trust to notify interested third parties, such as the Commission or, as the case may be, the Trust's insurer, of any modification of the Multisig characteristics in the future.³² Specifically, this commenter notes that the proposed rule change fails to provide a meaningful description of the security level of the storage system Multisig.³³ The proposal, the commenter asserts, "merely defines what a [M]ultisig is, in general, while only excluding the extreme cases M = 1, insecure, and M = N, unpractical."³⁴ The commenter states that the present signing design is complicated by the fact that the Signers, which are hardware devices, are activated by Signatories, which are human beings.³⁵ The commenter states that, as result, the given definition is overly abstract and incomplete. Because the signing design is critical to the safety of the funds, the commenter

³⁰ <u>See id.</u>

³¹ Additional information about the "M-of-N" signing design can be found in the Notice. See Notice, 81 FR at 45566-45567, <u>supra</u> note 3.

³² <u>See</u> Lethuillier Letter at 3, <u>supra</u> note 4.

³³ <u>See id.</u>

³⁴ <u>See id.</u>

³⁵ See id.

asserts, "the Trust should communicate the following elements to the interested third parties such as the Commission or, as the case should be, the Trust's insurer: (i) exact number of required Signers; (ii) Exact number of potential Signers; (iii) detailed explanation of why the chosen <u>M-of-N</u> configuration is adequate; (iv) complete list of the Signatories and what Signer(s) they can activate; and (v) useful information related to the Signatories' keys.³⁶ The commenter adds that the Trust should notify the relevant persons without delay of any modification of any of the above elements: (i) through (iii) should be publicly announced, and, for security reasons, (iv) and (v) should be notified to the interested third parties only.³⁷

C. <u>Need for Insurance on the Fund's Holdings</u>

A commenter notes that "[b]ecause safety measures cannot prevent thefts from the outside or the inside, [and] because human rationality is inherently bounded," he does not support the fact that the Trust's bitcoins are not insured.³⁸ This commenter further asserts that the Gemini Exchange was able to discover on its own a failure to secure the secret keys that would maintain the safe custody of bitcoins.³⁹

D. <u>Need for Regulation of the Bitcoin ETP Industry</u>

One commenter states that, despite the advances in Bitcoin development, owning and controlling bitcoins remains a highly specialized task, which includes secure management of private keys and "fairly advanced technological know-how."⁴⁰ Because of the difficulty and

³⁶ <u>See id.</u>

 $[\]frac{37}{\text{See id.}}$

³⁸ <u>See</u> Lethuillier Letter at 2-3, <u>supra</u> note 4.

³⁹ <u>See id.</u>

⁴⁰ <u>See</u> Anderson Letter, <u>supra</u> note 4.

specialized knowledge required to manage bitcoins, many investors rely on exchanges to act as custodians of their value. As a result, the commenter believes that a Bitcoin ETP is a major milestone and improvement and that it is crucial that the Commission regulate this industry.⁴¹ The commenter concludes by noting that the concerns regarding bitcoin security would be greatly diminished were it possible to trade an ETP backed by bitcoins, rather than the bitcoins themselves.⁴²

E. <u>Speculative Nature of Bitcoin as an Underlying Digital Asset</u>

One commenter disagreed with the notion that bitcoins are commodities; rather, the commenter likened bitcoins to be more like "penny stock" or shares of a ponzi scheme.⁴³ The commenter notes that the market price of a bitcoin, like that of a penny stock or ponzi fund, is "entirely speculative, based on expectations of traders about future prices, which will be based on expectations of future expectations."⁴⁴ The commenter asserts that Bitcoin has the essential characteristics of a penny stock or a pyramid scheme: the profit of early investors comes entirely from the investment of later ones.⁴⁵ In the commenter's view, because bitcoins are primarily used for investment, bitcoins should be regulated like a security, in which case they should be regulated the same way a penny stock or ponzi fund would be.⁴⁶ The commenter concludes that

 $\frac{46}{\text{See id.}}$

 $[\]frac{41}{\text{See id.}}$

⁴² See id.

⁴³ See Stolfi Letter, supra note 4.

 $[\]frac{44}{\text{See id.}}$

 $[\]frac{45}{\text{See id.}}$

the proposed ETF does not add any productive mechanism to the underlying bitcoins, but rather makes bitcoins accessible to investments funds, such as retirement funds.⁴⁷

F. Concerns Regarding the Gemini Exchange and the Gemini Exchange Spot Price

One commenter expresses concerns regarding the Gemini Exchange Spot Price.⁴⁸ Specifically, the commenter states, the nominal price of the shares under the proposal is supposed to be tied to the market price of bitcoins at the Gemini Exchange, which is closely tied to the ETP proponents.⁴⁹ In addition, the commenter states, the Gemini Exchange has relatively low liquidity and trade volume in bitcoins.⁵⁰ The commenter asserts that there is a significant risk that the nominal ETP share price "will be manipulated, by relatively small trades that manipulate the bitcoin price at that exchange."⁵¹

III. <u>Proceedings to Determine Whether to Approve or Disapprove SR-BatsBZX-2016-30 and</u> <u>Grounds for Disapproval Under Consideration</u>

The Commission is instituting proceedings pursuant to Section 19(b)(2)(B) of the Act⁵² to determine whether the proposed rule change should be approved or disapproved. Institution of such proceedings is appropriate at this time in view of the legal and policy issues raised by the proposed rule change. Institution of proceedings does not indicate that the Commission has reached any conclusions with respect to any of the issues involved. Rather, as described below,

⁴⁷ <u>See id.</u>

⁴⁸ <u>See id.</u>

⁴⁹ <u>See id.</u>

⁵⁰ See id.

⁵¹ See id.

⁵² 15 U.S.C. 78s(b)(2)(B).

the Commission seeks and encourages interested persons to provide comments on the proposed rule change.

Pursuant to Section 19(b)(2)(B) of the Act,⁵³ the Commission is providing notice of the grounds for disapproval under consideration. The Commission is instituting proceedings to allow for additional analysis of the proposed rule change's consistency with Section 6(b)(5) of the Act, which requires, among other things, that the rules of a national securities exchange be "designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade," and "to protect investors and the public interest."⁵⁴

IV. Procedure: Request for Written Comments

The Commission requests that interested persons provide written submissions of their views, data, and arguments with respect to the issues identified above, as well as any other concerns they may have with the proposal. In particular, the Commission invites the written views of interested persons concerning whether the proposal is consistent with Section 6(b)(5) or any other provision of the Act, or the rules and regulations thereunder. Although there do not appear to be any issues relevant to approval or disapproval that would be facilitated by an oral presentation of views, data, and arguments, the Commission will consider, pursuant to Rule 19b-4, any request for an opportunity to make an oral presentation.⁵⁵

⁵³ Id.

⁵⁴ 15 U.S.C. 78f(b)(5).

⁵⁵ Section 19(b)(2) of the Act, as amended by the Securities Act Amendments of 1975, Pub. L. 94-29 (June 4, 1975), grants the Commission flexibility to determine what type of proceeding – either oral or notice and opportunity for written comments – is appropriate for consideration of a particular proposal by a self-regulatory organization. See Securities Act Amendments of 1975, Senate Comm. on Banking, Housing & Urban Affairs, S. Rep. No. 75, 94th Cong., 1st Sess. 30 (1975).

Interested persons are invited to submit written data, views, and arguments regarding whether the proposal should be approved or disapproved by [insert date 21 days from publication in the <u>Federal Register</u>]. Any person who wishes to file a rebuttal to any other person's submission must file that rebuttal by [insert date 35 days from publication in the <u>Federal Register</u>]. The Commission asks that commenters address the sufficiency of the Exchange's statements in support of the proposal, which are set forth in the Notice,⁵⁶ in addition to any other comments they may wish to submit about the proposed rule change. In particular, the Commission seeks comment on the following:

1. The proposed fund, if approved, would be the first exchange-traded product available on U.S. markets to hold a digital asset such as bitcoins, which have neither a physical form (unlike commodities) nor an issuer that is currently registered with any regulatory body (unlike securities, futures, or derivatives), and whose fundamental properties and ownership can, by coordination among a majority of its network processing power, be changed (unlike any of the above). Moreover, as the Exchange acknowledges in its proposal, less than three years ago, the bitcoin exchange then responsible for nearly three-quarters of worldwide bitcoin trading lost a substantial amount of its bitcoin holdings through computer hacking or fraud and failed.⁵⁷ What are commenters' views about the current stability, resilience, fairness, and efficiency of the markets on which bitcoina are traded? What are commenters' views on whether an asset with the novel and unique properties of a bitcoin is an appropriate underlying asset for a product that will be traded on a national securities exchange? What are commenters' views on the risk of loss via

 $[\]frac{56}{\text{See supra note 3.}}$

⁵⁷ <u>See Notice, supra note 3, at 25 n.19.</u>

computer hacking posed by such an asset? What are commenters' views on whether an ETP based on such an asset would be susceptible to manipulation?

2. According to the Exchange, the Gemini Exchange Spot Price is representative of the accurate price of a bitcoin because of the positive price-discovery attributes of the Gemini Exchange marketplace. What are commenters' views on the manner in which the Trust proposes to value its holdings?

3. According to the Exchange, the Gemini Exchange is a Digital Asset exchange owned and operated by the Custodian and is an affiliate of the Sponsor. What are commenters' views regarding whether any potential conflict of interest or other issue might arise due to the relationship between entities such as the Sponsor, the Custodian, and the Gemini Exchange?

4. According to several commenters, there is a need for the Exchange to provide additional information regarding "proof of control" auditing, multisig protocols, and insurance with respect to the bitcoins held in custody on behalf of the Trust, in the interest of adequate security and investor confidence in bitcoin control. What are commenters' views on these recommendations regarding additional security, control, and insurance measures?

5. A commenter notes that the Gemini Exchange has relatively low liquidity and trading volume in bitcoins and that there is a significant risk that the nominal ETP share price "will be manipulated, by relatively small trades that manipulate the bitcoin price at that exchange."⁵⁸ What are commenters' views on the concerns expressed by this commenter? What are commenters' views regarding the susceptibility of the price of the Shares to manipulation, considering that the NAV would be based on the spot price of a single bitcoin exchange? What

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See Stolfi Letter, supra note 4.

are commenters' views generally with respect to the liquidity and transparency of the bitcoin market, and thus the suitability of bitcoins as an underlying asset for an ETP?

6. The Exchange asserts that the widespread availability of information regarding Bitcoin, the Trust, and the Shares, combined with the ability of Authorized Participants to create and redeem Baskets each Business Day, thereby utilizing the arbitrage mechanism, will be sufficient for market participants to value and trade the Shares in a manner that will not lead to significant deviations between intraday Best Bid/Best Ask and the Intraday Indicative Value or between the Best Bid/Best Ask and the NAV. In addition, the Exchange asserts that the numerous options for buying and selling bitcoins will both provide Authorized Participants with many options for hedging their positions and provide market participants generally with potential arbitrage opportunities, further strengthening the arbitrage mechanism as it relates to the Shares. What are commenters' views regarding these statements? Do commenters' agree or disagree with the assertion that Authorized Participants and other market makers will be able to make efficient and liquid markets in the Shares at prices generally in line with the NAV? What are commenters' views on whether the relationship between the Gemini Exchange and the Trust's Sponsor and Custodian might affect the arbitrage mechanism?

Comments may be submitted by any of the following methods:

Electronic comments:

- Use the Commission's Internet comment form (<u>http://www.sec.gov/rules/sro.shtml</u>); or
- Send an e-mail to <u>rule-comments@sec.gov</u>. Please include File Number SR-BatsBZX-2016-30 on the subject line.

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Paper comments:

 Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Numbers SR-BatsBZX-2016-30. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (http://www.sec.gov/rules/sro.shtml). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of these filings also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that

you wish to make available publicly. All submissions should refer to File Number SR-BatsBZX-2016-30 and should be submitted on or before [insert date 21 days from publication in the <u>Federal Register</u>]. Rebuttal comments should be submitted by [insert date 35 days from date of publication in the <u>Federal Register</u>].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.⁵⁹

Robert W. Errett Deputy Secretary

⁵⁹ 17 CFR 200.30-3(a)(57).