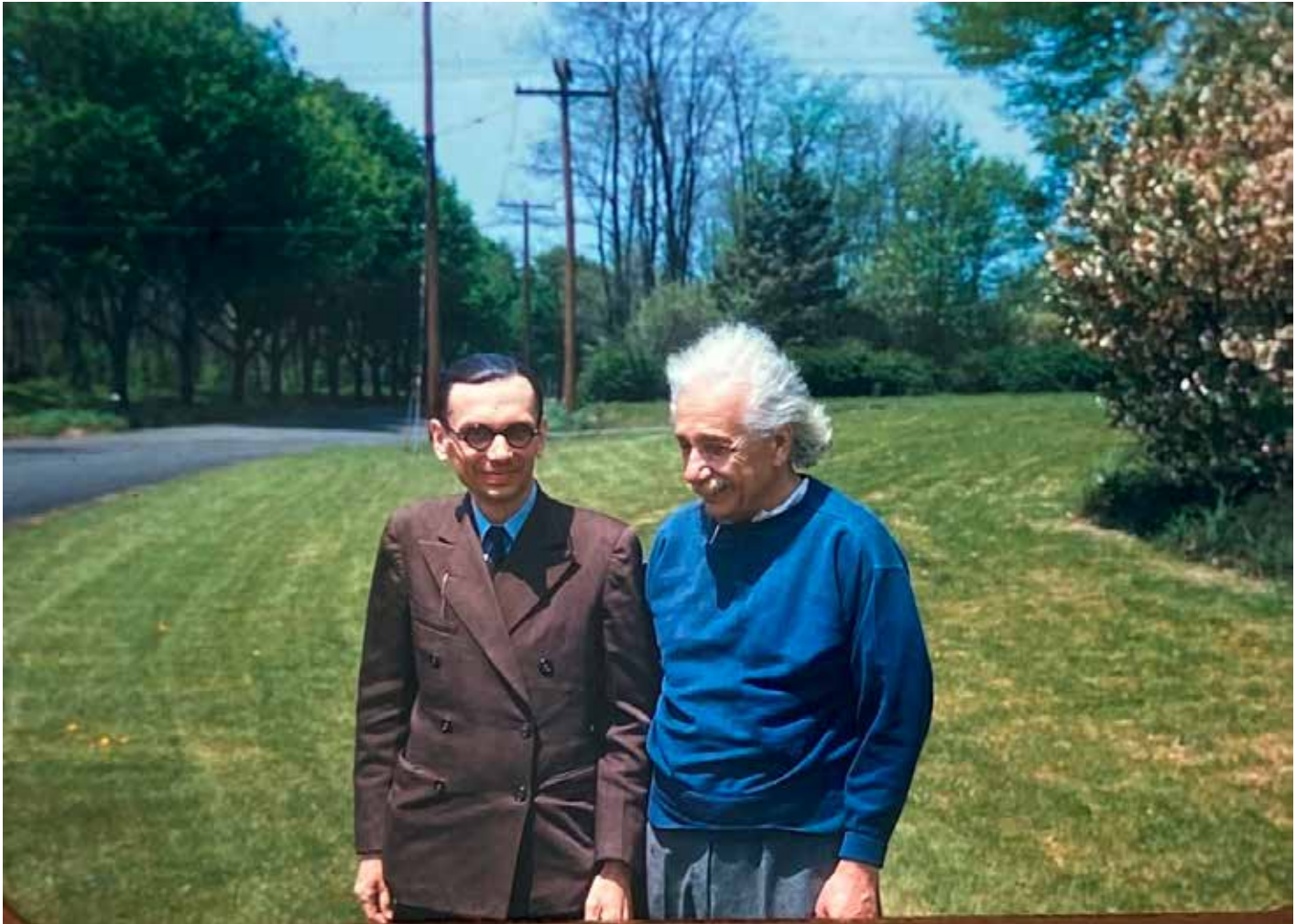


Bonhams

by be appropriated
to some genus.
[The descent of man. (Ch. Darwin)
multiple or single origin of mankind
has already been much discussed by polygenists
& monogenists. The question is at once settled for
the common descent of allied species. ~~as a~~
~~settled~~ for determining whether or not to
be called as species, ~~the~~
writing kinds of men should be called as species, ~~the~~
point, however,
it can be settled of arbitrariness, as long as
no definition, or test of ~~the~~ ~~word~~ of the term
species is universally accepted. We may see ~~the~~
how difficult it is to decide on the value of the term

History of Science and Technology, including Air and Space



lot 21

History of Science and Technology, including Air and Space

Los Angeles | 5 November, 2020

10 am – History of Science and Technology (lots 1 - 72)

12pm – Air and Space (lots 73 - 206)

BONHAMS

7601 W. Sunset Boulevard
Los Angeles CA 90046
bonhams.com

SALE NUMBER

26078
Lots 1 - 206

AUCTION INFORMATION

Bonded pursuant to California Civil
Code Sec. 1812.600;
Bond No. 57BSBGL0808

ILLUSTRATIONS

Front Cover: lot 2
Inside Front Cover: lot 21
Rear Cover: lot 59

PREVIEW BY APPOINTMENT:

Monday November 2, 10pm-5pm
Tuesday November 3, 10pm-5pm
Wednesday November 4, 10am-5pm

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BIDS

Register to bid online by visiting
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Alternatively, contact our Client
Services department at:
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IMPORTANT NOTICES

Please note that all customers,
irrespective of any previous activity
with Bonhams, are required to have
proof of identity when submitting
bids. Failure to do this may result in
your bid not being processed.

For absentee and telephone bids
we require a completed Bidder
Registration Form in advance of the
sale. The form can be found at the
back of every catalogue and on our
website at www.bonhams.com

and should be returned by email to
the specialist department or to the
Client Services department at bids.us@bonhams.com. Please note we
cannot guarantee bids within 24
hours of the sale.

Lots marked "W" are oversized
and therefore your purchases may
be subject to alternative shipping
and storage methods. For further
information, please refer to the
Oversized Lots page.

COVID-19 SAFETY STANDARDS

Bonhams' galleries are currently
subject to government restrictions
and arrangements may be subject
to change.

Preview: Lots will be made
available for in-person viewing by
appointment only. Please contact
the specialist department on
science.us@bonhams.com, or
(310) 623 – 2084 to arrange an
appointment before visiting our
galleries. In accordance with
Covid-19 guidelines, it is
mandatory that you wear a face
mask and observe social
distancing at all times. Additional
lot information and photographs
are available from the specialist
department upon request.

Bidding: We are unable to offer
in-person bidding for this auction.

Payment, Collections & Shipping:
We strongly encourage contactless
payment of invoices prior to
collection via wire transfer or credit
card through your MyBonhams
account. In-person or third-party
collections from our galleries are
scheduled in advance with our
Client Services team.

Foreword

Welcome to the History of Science and Technology auction, 2020 edition. This has certainly been a strange year, and our relationship to technology has been laid bare in a way no one anticipated. Stuck at home on zoom calls all day? Ordering your food and other supplies with your phone? Managing your children's remote learning? Contact tracing via app? Worried about the large and small ramifications of living through a global pandemic? How is technology making things better and worse?

Like everybody else, the auction industry has had to adapt to this moment. We moved quickly in April to transition our spring and summer sales to an online-only format before introducing a life-hybrid format that merges the immediacy of a traditional auction with the ease and universality of online auctions. Interestingly, the moment the industry is having now (fully integrated online bidding across all sales) is what was envisioned over 20 years ago, and what we've been creeping toward since then, until the moment when the pandemic pushed us at last off the end of the dock.

This sale, more than any other we are holding this year, speaks to the historical moment we are in. It offers us a chance to look backwards, sometimes only a few decades or so, to chart the acceleration of scientific advances and technological changes leading to this moment. The sale opens with a small grouping of Charles Darwin material that includes a what is likely the most important of his manuscript leaves in private hands. In it Darwin not only discusses human evolution, but specifically points toward humankind's monogenetic origins. We also offer a first edition of his landmark *On the Origin of Species*... as well as a first edition copy of *The Descent of Man*.

Those of us stuck in our homes since March have a greater appreciation for the entertainment industry than before. Our small but important selection of motion picture cameras includes an extremely early example of a Lumière Cinématographe from 1896; a British Prestwich No.4, the finest camera of its time; and a very early (c.1912) color motion picture camera by the surgeon Eugène Louis Doyen. We follow this with an intriguing 1936-1937 technical record of Los Angeles' first television station, W6XAO.

A group of material passed down from the estate of Institute of Advanced Studies economist Oskar Morgenstern (best known as one of the founders, with John von Neumann, of the mathematical field of game theory) includes a group of rare signed and inscribed offprints and letters from the great logician Kurt Gödel.

This year we have an especially nice section of computing history property from the collector Serge Roubé, including printed works from John Napier, George Boole, and Charles Babbage to works like *Digital Computer Newsletter*, *Computers and Automation*, and the Harvard Mark I Manual which was written mainly by Howard Aiken and Grace Hopper. The Roubé collection also includes early calculating devices like a very good replica of a Pascaline, a selection of arithmometers, circular slide rules, and early home computers.

The section highlight is the Texas Instruments Cal-Tech prototype hand-held calculator which marks a key moment in microelectronics. This comes directly from the estate of its creator, Jerry Merryman. The TI hand-held calculator was the "killer app" for the integrated circuit. Its usefulness made it immensely popular, and led to a greater desire for microelectronics in everyday life.

Early on in the pandemic we decided to merge the Air and Space auction into the present History of Science and Technology sale. We've always thought the two fit together, as many of the greatest technological achievements of the 20th century were produced in service of the Space Race. For this sale, however, the Air & Space property will be a separate, second session in order to provide bidders with a better sense of the sale timing.

The session begins with the Wright Brothers, but quickly moves into space travel and the star lot: an original Gemini 133P Trainer Console used by the Gemini astronauts at the Manned Spacecraft Center in Houston. Our console is serial number 1; purportedly only two consoles were ever made, so the likelihood of astronauts like Neil Armstrong, Buzz Aldrin, Gus Grissom, Ed White, Michael Collins, etc. using this one is very high. The Gemini program developed and tested all of the most important techniques necessary for a Moon shot: rendezvous and docking in space, amount of time spent in space and effectively performing EVAs.

The session also includes a nice selection of flown items from Project Gemini, Apollo (including a complete microform Holy Bible flown to the Lunar surface aboard the Apollo 14 Lunar Module) and the Apollo-Soyuz Test Project, a wonderful selection of photographs, detailed models, and an extensive selection of sterling silver Robbins medallions. The sale will be available to view by private appointment in our Los Angeles gallery November 2nd through the 4th. Please feel free to reach out to me with any questions or to set up a viewing.

Adam Stackhouse
Specialist in Charge.

Conditions of sale

The following Conditions of Sale, as amended by any published or posted notices or verbal announcements during the sale, constitute the entire terms and conditions on which property listed in the catalog shall be offered for sale or sold by Bonhams & Butterfields Auctioneers Corp. and any consignor of such property for whom Bonhams acts as agent. By participating in this sale, you agree to be bound by these terms and conditions.

If live online bidding is available for the subject auction, additional terms and conditions of sale relating to online bidding will apply; see www.bonhams.com/WebTerms for the supplemental terms. As used herein, "Bonhams," "we" and "us" refer to Bonhams & Butterfields Auctioneers Corp.

1. As used herein, the term "bid price" means the price at which a lot is successfully knocked down to the buyer. The term "purchase price" means the aggregate of (a) the bid price, (b) a PREMIUM retained by us and payable by the buyer (the "buyer's premium"), EQUAL TO 27.5% OF THE FIRST \$12,500 OF THE BID PRICE, PLUS 25% OF THE AMOUNT OF THE BID PRICE ABOVE \$12,500 UP TO AND INCLUDING \$600,000, PLUS 20% OF THE AMOUNT OF THE BID PRICE ABOVE \$600,000 UP TO AND INCLUDING \$6,000,000, PLUS 14.5% OF THE AMOUNT OF THE BID PRICE ABOVE \$6,000,000, and (c) unless the buyer is exempt by law from the payment thereof, any Alabama, Arizona, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Idaho, Illinois, Iowa, Indiana, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Nebraska, Nevada, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Texas, Utah, Virginia, Washington, D.C., Washington state, West Virginia, Wisconsin, Wyoming or other state or local sales tax (or compensating use tax) and other applicable taxes. With regard to New York sales tax, please refer to the "Sales and Use Tax" section of these Conditions of Sale.

2. In order to bid at the sale, prospective bidders must submit to Bonhams a completed bidder registration form (appearing at the end of this catalog) and any other requested information or references. New bidders and bidders who have not recently updated their registration information must pre-register to bid at least two business days before the sale. Individuals will be required to provide government-issued proof of identity and proof of address. Entity clients will be required to provide documentation including confirmation of entity registration showing the registered name, confirmation of registered address, documentary proof of officers and beneficial owners, proof of authority to transact on behalf of the entity and government-issued proof of identity for the individual who is transacting on the entity's behalf.

We may also request a financial reference and/or deposit from bidders before approving the bidder registration. In the event a deposit is submitted and you are not the successful bidder, your deposit will be returned to you. If you are the successful bidder, any such deposit will be credited to offset the appropriate portion of the purchase price.

We reserve the right to request further information, including regarding the source of funds, in order to complete bidder identification and registration procedures (including completing any anti-money laundering and/or anti-terrorism financing checks we may require) to our satisfaction. If our bidder identification and registration procedures are not satisfied, we may, in our sole discretion, decline to register any bidder or reject any bid or cancel any sale to such bidder.

Every bidder shall be deemed to act as a principal unless prior to the commencement of the sale there is a written acceptance by Bonhams of a bidder registration form completed and signed by the principal which clearly states that the authorized bidding agent is acting on behalf of the named principal. Absent such written acceptance by Bonhams, any person placing a bid as agent on behalf of another (whether or not such person has disclosed that fact or the identity of the principal) may be jointly and severally

liable with the principal under any contract resulting from the acceptance of a bid. Every bidder shall be responsible for any use of its assigned paddle or bidding account, regardless of the circumstances.

3. You represent and warrant that: (i) you have provided us with true and correct copies of valid identification and proof of residence and, if applicable, financial and/or corporate documents; (ii) neither you, your principal (if applicable, and subject to Bonhams' prior written acceptance pursuant to paragraph 2 above), nor any individual or entity with a beneficial or ownership interest in either or in the purchase transaction is on the Specially Designated Nationals List maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury nor subject to any other sanctions or embargo program or regulation in effect in the United States, European Union, England and Wales, or other applicable jurisdictions; (iii) if you are acting as an agent for a principal, you have conducted appropriate due diligence into such principal, and agree that Bonhams shall be entitled to rely upon such due diligence, you will retain adequate records evidencing such due diligence for a period of five (5) years following the consummation of the sale, and will make these records available for inspection upon Bonhams' request; (iv) neither the purchase transaction (including your bidding activity) nor the purchase funds are connected with nor derive from any criminal activity, and they are not designed to nor have they or shall they, violate the banking, anti-money laundering, or currency transfer laws or other regulations (including without limitation, import-export laws) of any country or jurisdiction, or further any other unlawful purpose, including without limitation collusion, anti-competitive activity, tax evasion or tax fraud.

You acknowledge and agree that we may rely upon the accuracy and completeness of the foregoing warranties.

4. On the fall of the auctioneer's hammer, the highest bidder shall have purchased the offered lot in accordance and subject to compliance with all of the conditions set forth herein and (a) assumes full risk and responsibility therefor, (b) if requested will sign a confirmation of purchase, and (c) will pay the purchase price in full or such part as we may require for all lots purchased. No lot may be transferred.

Unless otherwise agreed, payment in good, cleared funds is due and payable within five (5) business days following the auction sale. Whenever the buyer pays only a part of the total purchase price for one or more lots purchased, we may apply such payments, in our sole discretion, to the lot or lots we choose. Payment will not be deemed made in full until we have received good, cleared funds for all amounts due. Title in any purchased property will not pass until full and final payment has been received by Bonhams. Accounts must be settled in full before property is released to the buyer. In the event property is released earlier, such release will not affect the passing of title or the buyer's obligation to timely remit full payment.

We reserve the right to refuse to accept payment from a source other than the registered bidder or buyer of record. Once an invoice is issued, we cannot change the buyer's name on an invoice.

Payment for purchases must be made in the currency in which the sale is conducted. Bonhams' preferred payment method is by wire transfer. For final purchases exceeding US \$25,000.00, all payments must be in the form of wire transfer unless other arrangements have been approved in advance. For final purchases below US \$25,000.00, payment may also be made in or by the following methods: (i) Cash. Please note that the amount of cash that can be accepted from a given purchaser is limited to US\$5,000 per auction sale (whether by single or multiple related payments). If the amount payable exceeds that sum, the balance must be paid by another method. (ii) Cashier's check, money order, or personal check with approved credit drawn on a U.S. bank. A processing fee will be assessed on any returned checks. (iii) Visa, MasterCard, American Express or Discover debit or credit card issued in the name of the purchaser or record.

Only one debit or credit card may be used for payment of an account balance. This method of payment may not be available to first time purchasers.

To the fullest extent permitted by applicable law, the buyer grants us a security interest in the property, and we may retain as collateral security for the buyer's obligations to us, any property and all monies held or received by us for the account of the buyer, in our possession. We also retain all rights of a secured party under the Uniform Commercial Code (which shall mean the New York Uniform Commercial Code, except where the Uniform Commercial Code of another state governs the perfection of a security interest in collateral located in that state), and you agree that we may file financing statements without your signature. If the foregoing conditions or any other applicable conditions herein are not complied with, in addition to all other remedies available to us and the consignor by law, we may at our election: (a) hold the buyer liable for the full purchase price and any late charges, collection costs, attorneys' fees and costs, expenses and incidental damages incurred by us or the consignor arising out of the buyer's breach; (b) cancel the sale, retaining as liquidated damages all payments made by the buyer; and/or (c) cancel the sale and/or resell the purchased property, at public auction and/or by private sale, and in such event the buyer shall be liable for the payment of all consequential damages, including any deficiencies or monetary losses, and all costs and expenses of such sale or sales, our commissions at our standard rates, all other charges due hereunder, all late charges, collection costs, attorneys' fees and costs, expenses and incidental damages. In addition, where two or more amounts are owed in respect of different transactions by the buyer to us, to Bonhams 1793 Limited and/or to any of our other affiliates, subsidiaries or parent companies worldwide within the Bonhams Group, we reserve the right to apply any monies paid in respect of a transaction to discharge any amount owed by the buyer. If all fees, commissions, premiums, bid prices and other sums due to us from the buyer are not paid promptly as provided in these Conditions of Sale, we reserve the right to impose a finance charge equal to 1.5% per month (or, if lower, the maximum nonusurious rate of interest permitted by applicable law), on all amounts due to us beginning on the 31st day following the sale until payment is received, in addition to other remedies available to us by law.

5. We reserve the right to withdraw any property and to divide and combine lots at any time before such property's auction. Unless otherwise announced by the auctioneer at the time of sale, all bids are per lot as numbered in the catalog and no lots shall be divided or combined for sale.

6. We reserve the right to reject a bid from any bidder, to split any bidding increment, and to advance the bidding in any manner the auctioneer may decide. In the event of any dispute between bidders, or in the event the auctioneer doubts the validity of any bid, the auctioneer shall have sole and final discretion either to determine the successful bidder, re-open the bidding, or to cancel the sale and re-offer and resell the article in dispute. If any dispute arises after the sale, our sales records shall be conclusive in all respects.

We further reserve the right to cancel the sale of any property if (i) you are in breach of your representations and warranties as set forth in paragraph 3 above; (ii) we, in our sole discretion, determine that such transaction might be unlawful or might subject Bonhams or the consignor to any liability to any third party; or (iii) there are any other grounds for cancellation under these Conditions of Sale.

7. If we are prevented by fire, theft or any other reason whatsoever from delivering any property to the buyer or a sale otherwise cannot be completed, our liability shall be limited to the sum actually paid therefor by the buyer and shall in no event include any compensatory, incidental or consequential damages.

8. All lots in the catalog are offered subject to a reserve unless otherwise indicated in the catalog. The reserve is the confidential minimum bid price at which such lot will be sold

Conditions of sale - Continued

and it does not exceed the low estimate value for the lot. If a lot is offered subject to a reserve, we may implement such reserve by bidding on behalf of the consignor, whether by opening bidding or continuing bidding in response to other bidders until reaching the reserve. If we have an interest in an offered lot and the proceeds therefrom other than our commissions, we may bid up to the reserve to protect such interest. If the auctioneer determines that any opening or subsequent bid is below the reserve for a lot, (s)he may reject such opening bid and withdraw the item from sale. CONSIGNORS ARE NOT ALLOWED TO BID ON THEIR OWN ITEMS.

9. Other than as provided in the Limited Right of Rescission with respect to identification of authorship, all property is sold "AS IS" and any statements contained in the catalog or in any advertisement, bill of sale, announcement, condition report, invoice or elsewhere as to period, culture, source, origin, media, measurements, size, quality, rarity, provenance, importance, exhibition and literature of historical relevance, merchantability, fitness for a particular purpose, or physical condition ARE QUALIFIED STATEMENTS OF OPINION AND NOT REPRESENTATIONS, WARRANTIES, OR ASSUMPTION OF LIABILITY. Neither Bonhams nor the consignor shall be responsible for any error or omission in the catalog description of any property. No employee or agent of Bonhams is authorized to make on our behalf or on that of the consignor any representation or warranty, oral or written, with respect to any property.

10. All purchased property shall be removed from the premises at which the sale is conducted by the date(s) and time(s) set forth in the "Buyer's Guide" portion of this catalog. If not so removed, daily storage fees will be payable to us by the buyer as set forth therein. We reserve the right to transfer property not so removed to an offsite warehouse at the buyer's risk and expense, as set forth in more detail in the "Buyer's Guide." Packing and handling of purchased lots are the responsibility of the buyer and at the buyer's entire risk, as are the identification, application for, and cost(s) of obtaining of any necessary export, import, restricted material (e.g. endangered species) or other permit for such lots.

For an additional fee, Bonhams may provide packing and shipping services for certain items as noted in the "Buyer's Guide" section of the catalog.

11. The copyright in the text of the catalog and the photographs, digital images and illustrations of lots in the catalog belong to Bonhams or our licensors. You will not reproduce or permit anyone else to reproduce such text, photographs, digital images or illustrations without our prior written consent. Bonhams and the consignor make no representation or warranty as to whether the buyer acquires any copyrights on the purchase of an item of Property.

12. Bonhams may, in our discretion, as a courtesy and free of charge, execute bids on your behalf if so instructed by you, provided that neither Bonhams nor our employees or agents will be liable for any error or default (whether human or otherwise) in doing so or for failing to do so. Without limiting the foregoing, Bonhams (including our agents and employees) shall not be responsible for any problem relating to telephone, online, or other bids submitted remotely through any means, including without limitation, any telecommunications or internet fault or failure, or breakdown or problems with any devices or online platforms, including third-party online platforms, regardless of whether such issue arises with our, your, or such third-party's technology, equipment, or connection. By participating at auction by telephone or online, bidders expressly consent to the recording of their bidding sessions and related communications with Bonhams and our employees and agents, and acknowledge their acceptance of these Conditions of Sale as well as any additional terms and conditions applicable to any such bidding platform or technology.

13. These Conditions of Sale shall bind the successors and assigns of all bidders and buyers and inure to the benefit

of our successors and assigns. No waiver, amendment or modification of the terms hereof (other than posted notices or oral announcements during the sale) shall bind us unless specifically stated in writing and signed by us. No act or omission of Bonhams, its employees or agents, nor any failure thereof to exercise any remedy hereunder, shall operate or be deemed to operate as a waiver of Bonhams' rights under these Conditions of Sale. If any part of these Conditions of Sale is for any reason invalid or unenforceable, the rest shall remain valid and enforceable.

14. These Conditions of Sale and the buyer's and our respective rights and obligations hereunder shall be governed by and construed and enforced in accordance with the laws of the State of New York. Any dispute, controversy or claim arising out of or relating to this agreement, or the breach, termination or validity thereof, brought by or against Bonhams (but not including claims brought against the consignor by the buyer of lots consigned hereunder) shall be resolved by the procedures set forth below.

15. You accept and agree that Bonhams will hold and process your personal information and may share and use it as required by law and as described in, and in line with Bonhams' Privacy Policy, available at website at www.bonhams.com/legals/. If you desire access, update, or restriction to the use of your personal information, please email data.protection@bonhams.com.

SALES AND USE TAX

New York sales tax is charged on the hammer price, buyer's premium and any other applicable charges on any property collected or delivered in New York State, regardless of the state or country in which the buyer resides or does business. Buyers who make direct arrangements for collection by a shipper who is considered a "private" or "contract" carrier by the New York Department of Taxation and Finance will be charged New York sales tax, regardless of the destination of the property. Property collected for delivery to a destination outside of New York by a shipper who is considered a "common carrier" by the New York Department of Taxation and Finance (e.g. United States Postal Service, United Parcel Service, and FedEx) is not subject to New York sales tax, but if it is delivered into any state in which Bonhams is registered or otherwise conducts business sufficient to establish a nexus, Bonhams may be required by law to collect and remit the appropriate sales tax in effect in such state. Property collected for delivery outside of the United States by a freight-forwarder who is registered with the Transportation Security Administration ("TSA") is not subject to New York sales tax.

MEDIATION AND ARBITRATION PROCEDURES

- (a) Within 30 days of written notice that there is a dispute, the parties or their authorized and empowered representatives shall meet by telephone and/or in person to mediate their differences. If the parties agree, a mutually acceptable mediator shall be selected and the parties will equally share the fees and expenses of mediation. The mediator shall be a retired judge or an attorney familiar with commercial law and trained in or qualified by experience in handling mediations. Any communications made during the mediation process shall not be admissible in any subsequent mediation, arbitration or judicial proceeding. All proceedings and any resolutions thereof shall be confidential, and the terms governing arbitration set forth in paragraph (c) below shall govern.
- (b) If mediation does not resolve all disputes between the parties, or in any event no longer than 60 days after receipt of the written notice of dispute referred to above, the parties shall submit the dispute for binding arbitration before a single neutral arbitrator. Such arbitrator shall be a retired judge or an attorney familiar with commercial law and trained in or qualified by experience in handling arbitrations. Such arbitrator shall make all appropriate disclosures required by law. The arbitrator shall be drawn from a panel of a national or international arbitration

service agreed to by the parties, and shall be selected as follows: (i) If the arbitration service has specific rules or procedures, those rules or procedures shall be followed; (ii) If the arbitration service does not have rules or procedures for the selection of an arbitrator, the arbitrator shall be an individual jointly agreed to by the parties. If the parties cannot agree on an arbitration service, the arbitration shall be conducted by Judicial Arbitration and Mediation Services, Inc. ("JAMS") or another national or international alternative dispute resolution ("ADR") provider of Bonhams' choice, and the arbitrator shall be selected in accordance with JAMS' Streamlined Arbitration Rules and Procedures or the rules of the other ADR provider selected by Bonhams. The arbitrator's award shall be in writing and shall set forth findings of fact and legal conclusions.

- (c) Unless otherwise agreed to by the parties or provided by the published rules of the arbitration service:
- (i) The arbitration shall occur within 60 days following the selection of the arbitrator;
 - (ii) The arbitration shall be conducted in New York, New York; and
 - (iii) Discovery and the procedure for the arbitration shall be as follows:
 - A. All arbitration proceedings shall be confidential;
 - B. The parties shall submit written briefs to the arbitrator no later than 15 days before the arbitration commences;
 - C. Discovery, if any, shall be limited as follows: (I) Requests for no more than 10 categories of documents, to be provided to the requesting party within 14 days of written request therefor; (II) No more than two (2) depositions per party, provided however, the deposition(s) are to be completed within one (1) day; (III) Compliance with the above shall be enforced by the arbitrator in accordance with New York law;
 - D. Each party shall have no longer than eight (8) hours to present its position. The entire hearing before the arbitrator shall not take longer than three (3) consecutive days;
 - E. The award shall be made in writing no more than 30 days following the end of the proceeding. Judgment upon the award rendered by the arbitrator may be entered by any court having jurisdiction thereof.

To the fullest extent permitted by law, and except as required by applicable arbitration rules, each party shall bear its own attorneys' fees and costs in connection with the proceedings and shall share equally the fees and expenses of the arbitration.

LIMITED RIGHT OF RESCISSION

If within one (1) year from the date of sale, the original buyer (a) gives written notice to us alleging that the identification of Authorship (as defined below) of such lot as set forth in the UPPERCASE TYPE heading of the catalog description of such lot (as amended by any saleroom notices or verbal announcements during the sale) is not substantially correct based on a fair reading of the catalog (including the terms of any glossary contained therein), and (b) within 10 days after such notice returns the lot to us in the same condition as at the time of sale, and (c) establishes the allegation in the notice to our satisfaction (including by providing one or more written opinions by recognized experts in the field, as we may reasonably require), then the sale of such lot will be rescinded and, unless we have already paid to the consignor monies owed him in connection with the sale, the original purchase price will be refunded.

Conditions of sale - Continued

If, prior to receiving such notice from the original buyer alleging such defect, we have paid the consignor monies owed him in connection with the sale, we shall pay the original buyer the amount of our commissions, any other sale proceeds to which we are entitled and applicable taxes received from the buyer on the sale and make demand on the consignor to pay the balance of the original purchase price to the original buyer. Should the consignor fail to pay such amount promptly, we may disclose the identity of the consignor and assign to the original buyer our rights against the consignor with respect to the lot the sale of which is sought to be rescinded. Upon such disclosure and assignment, any liability of Bonhams as consignor's agent with respect to said lot shall automatically terminate.

The foregoing limited right of rescission is available to the original buyer only and may not be assigned to or relied upon by any subsequent transferee of the property sold. The buyer hereby accepts the benefit of the consignor's warranty of title and other representations and warranties made by the consignor for the buyer's benefit. Nothing in this section shall be construed as an admission by us of any representation of fact, express or implied, obligation or responsibility with respect to any lot. **THE BUYER'S SOLE AND EXCLUSIVE REMEDY AGAINST BONHAMS FOR ANY REASON WHATSOEVER IS THE LIMITED RIGHT OF RESCISSION DESCRIBED IN THIS SECTION.**

"Authorship" means only the identity of the creator, the period, culture and source or origin of the lot, as the case may be, as set forth in the UPPERCASE TYPE heading of the print catalog entry. The right of rescission does not extend to: (a) works of art executed before 1870 (unless these works are determined to be counterfeits created since 1870), as this is a matter of current scholarly opinion which can change; (b) titles, descriptions, or other identification of offered lots, which information normally appears in lower case type below the UPPERCASE TYPE heading identifying the Authorship; (c) Authorship of any lot where it was specifically mentioned that there exists a conflict of specialist or scholarly opinion regarding the Authorship of the lot at the time of sale; (d) Authorship of any lot which as of the date of sale was in accordance with the then generally-accepted opinion of scholars and specialists regarding the same; or (e) the identification of periods or dates of creation in catalog descriptions which may be proven inaccurate by means of scientific processes that are not generally accepted for use until after publication of the catalog in which the property is offered or that were unreasonably expensive or impractical to use at the time of such publication.

LIMITATION OF LIABILITY

EXCEPT AS EXPRESSLY PROVIDED ABOVE, ALL PROPERTY IS SOLD "AS IS." NEITHER BONHAMS NOR THE CONSIGNOR MAKES ANY REPRESENTATION

OR WARRANTY, EXPRESS OR IMPLIED, AS TO THE MERCHANTABILITY, FITNESS OR CONDITION OF THE PROPERTY OR AS TO THE CORRECTNESS OF DESCRIPTION, GENUINENESS, ATTRIBUTION, PROVENANCE OR PERIOD OF THE PROPERTY OR AS TO WHETHER THE BUYER ACQUIRES ANY COPYRIGHTS OR OTHER INTELLECTUAL PROPERTY RIGHTS IN LOTS SOLD OR AS TO WHETHER A WORK OF ART IS SUBJECT TO THE ARTIST'S MORAL RIGHTS OR OTHER RESIDUAL RIGHTS OF THE ARTIST. THE BUYER EXPRESSLY ACKNOWLEDGES AND AGREES THAT IN NO EVENT SHALL BONHAMS BE LIABLE FOR ANY DAMAGES INCLUDING, WITHOUT LIMITATION, ANY COMPENSATORY, INCIDENTAL OR CONSEQUENTIAL DAMAGES. IN NO EVENT SHALL THE AGGREGATE LIABILITY OF BONHAMS AND ITS CONSIGNOR TO A PURCHASER EXCEED THE PURCHASE PRICE ACTUALLY PAID FOR A DISPUTED ITEM OF PROPERTY.

Seller's guide

SELLING AT AUCTION

Bonhams can help you every step of the way when you are ready to sell art, antiques and collectible items at auction. Our regional offices and representatives throughout the US are available to service all of your needs. Should you have any further questions, please visit our website at www.bonhams.com/us for more information or call our Client Services Department at +1 (323) 850 7500.

AUCTION ESTIMATES

The first step in the auction process is to determine the auction value of your property. Bonhams' world-renowned specialists will evaluate your special items at no charge and in complete confidence. You can obtain an auction estimate in many ways:

- Attend one of our Auction Evaluation Events held regularly at our galleries and in other major metropolitan areas. The updated schedule for Bonhams Auction Evaluation Events is available at www.bonhams.com/us.
- Call our Client Services Department to schedule a private appointment at one of our galleries. If you have a large collection, our specialists can travel, by appointment, to evaluate your property on site.
- Send clear photographs to us of each individual item, including item dimensions and other pertinent information with each picture. Photos should be sent to Bonhams' address in envelopes marked as "photo auction estimate". Alternatively, you can submit your request using our online form at www.bonhams.com/us. Digital images may be attached to the form. Please limit your images to no more than five (5) per item.

CONSIGNING YOUR PROPERTY

After you receive an estimate, you may consign your property to us for sale in the next appropriate auction. Our staff assists you throughout the process, arranging transportation of your items to our galleries (at the consignor's expense), providing a detailed inventory of your consignment, and reporting the prices realized for each lot. We provide secure storage for your property in our warehouses and all items are insured throughout the auction process. You will receive payment for your property approximately 35 days after completion of sale.

Sales commissions vary with the potential auction value of the property and the particular auction in which the property is offered. Please call us for commission rates.

PROFESSIONAL APPRAISAL SERVICES

Bonhams' specialists conduct insurance and fair market value appraisals for private collectors, corporations, museums, fiduciaries and government entities on a daily basis. Insurance appraisals, used for insurance purposes, reflect the cost of replacing property in today's retail market. Fair market value appraisals are used for estate, tax and family division purposes and reflect prices paid by a willing buyer to a willing seller.

When we conduct a private appraisal, our specialists will prepare a thorough inventory listing of all your appraised property by category. Valuations, complete descriptions and locations of items are included in the documentation.

Appraisal fees vary according to the nature of the collection, the amount of work involved, the travel distance, and whether the property is subsequently consigned for auction.

Our appraisers are available to help you anywhere and at any time. Please call our Client Services Department to schedule an appraisal.

ESTATE SERVICES

Since 1865, Bonhams has been serving the needs of fiduciaries – lawyers, trust officers, accountants and executors – in the disposition of large and small estates. Our services are specially designed to aid in the efficient appraisal and disposition of fine art, antiques, jewelry, and collectibles. We offer a full range of estate services, ranging from flexible financial terms to tailored accounting for heirs and their agents to world-class marketing and sales support.

For more information or to obtain a detailed Trust and Estates package, please visit our website at www.bonhams.com/us or contact our Client Services Department.

Buyer's guide

BUYING AND BIDDING AT AUCTION

Whether you are an experienced bidder or an enthusiastic novice, auctions provide a stimulating atmosphere unlike any other. Bonhams previews and sales are free and open to the public. As you will find in these directions, bidding and buying at auction is easy and exciting. Should you have any further questions, please visit our website at www.bonhams.com or email our Client Services Department at bids.us@bonhams.com.

Catalogs

Before each auction we publish illustrated catalogs. Our catalogs provide descriptions and estimated values for each "lot." A lot may refer to a single item or to a group of items auctioned together. The catalogs also include the dates and the times for the previews and auctions. We offer our catalogs by subscription or by single copy. For information on subscribing to our catalogs, you may refer to the subscription form in this catalog, call our Client Services Department, or visit our website at www.bonhams.com/us.

Previews

Auction previews are your chance to inspect each lot prior to the auction. We encourage you to look closely and examine each object on which you may want to bid so that you will know as much as possible about it. Except as expressly set forth in the Conditions of Sale, items are sold "as is" and with all faults; illustrations in our catalogs, website and other materials are provided for identification only. At the previews, our staff is always available to answer your questions and guide you through the auction process. Condition reports may be available upon request.

Estimates

Bonhams catalogs include low and high value estimates for each lot, exclusive of the buyer's premium and tax. The estimates are provided as an approximate guide to current market value based primarily on previous auction results for comparable pieces, and should not be interpreted as a representation or prediction of actual selling prices. They are determined well in advance of a sale and are subject to revision. Please contact us should you have any questions about value estimates.

Reserve

All lots in a catalog are subject to a reserve unless otherwise indicated. The reserve is the minimum price that the seller is willing to accept for a lot. This amount is confidential and does not exceed the low estimated value.

Auction House's Interest in Property Offered at Auction

On occasion, Bonhams may offer property in which it has an ownership interest in whole or in part or otherwise has an economic interest. Such property, if any, is identified in the catalog with a ▲ symbol next to the lot number(s). Bonhams may also offer property for a consignor that has been guaranteed a minimum price for its property by Bonhams or jointly by Bonhams and a third party. Bonhams and any third parties providing a guarantee may benefit financially if the guaranteed property is sold successfully and may incur a financial loss if its sale is not successful. Such property, if any, is identified in the catalog with a symbol next to the lot number(s).

Bidding at Auction

At Bonhams, you can bid in many ways: in person, via absentee bid, over the phone, or via Bonhams' live online bidding facility. Absentee bids can be submitted in person, online, or via email. Irrespective of previous bidding activity a valid Bonhams client account is required to participate in bidding activity. You will be required to provide government-issued proof of identity and residence, and if you are a company, your certificate of incorporation or equivalent documentation with your name and registered address, government issued proof of your current address, documentary proof of your beneficial owners and directors, and proof of authority to transact. By bidding at auction, whether in person or by agent, by absentee bid, telephone, online or other means, the buyer or bidder agrees to be bound by the Conditions of Sale. Lots are auctioned in consecutive numerical order as they appear in the catalog. Bidding normally begins below the low estimate. The auctioneer will accept bids from interested parties present in the saleroom, from telephone bidders, and from absentee bidders who have left written bids in advance of the sale. The auctioneer may also execute bids on behalf of the consignor up to the amount of the reserve, but never above it. We assume no responsibility for failure to execute bids for any reason whatsoever.

In Person

If you are planning to bid at auction for the first time, you will need to register at the reception desk in order to receive a numbered bid card. To place a bid, hold up your card so that the auctioneer can clearly see it. Decide on the maximum auction price that you wish to pay, exclusive of buyer's premium and tax, and continue bidding until your bid prevails or you reach your limit. If you are the successful bidder on a lot, the auctioneer will acknowledge your paddle number and bid amount.

Absentee Bids

As a service to those wishing to place bids, we may at our discretion accept bids without charge in advance of auction online or in writing on bidding forms available from us. "Buy" bids will not be accepted; all bids must state the highest bid price the bidder is willing to pay. Our auction staff will try to bid just as you would, with the goal of obtaining the item at the lowest bid price possible. In the event identical bids are submitted, the earliest bid submitted will take precedence. Absentee bids shall be executed in competition with other absentee bids, any applicable reserve, and bids from other auction participants. A friend or agent may place bids on your behalf, provided that we have received your written authorization prior to the sale. Absentee bid forms are available in our catalogs, online at www.bonhams.com/us, at offsite auction locations and at our Los Angeles, San Francisco and New York galleries.

By Telephone

We can arrange for you to bid by telephone. To arrange for a telephone bid, please contact our Client Services Department a minimum of 24 hours prior to the sale.

Online

We offer live online bidding for most auctions and accept absentee bids online for all our auctions. Please visit www.bonhams.com/us for details.

Bid Increments

Bonhams generally uses the following increment multiples as bidding progresses:

\$50-200.....	by \$10s
\$200-500.....	by \$20/50/80s
\$500-1,000.....	by \$50s
\$1,000-2,000.....	by \$100s
\$2,000-5,000.....	by \$200/500/800s
\$5,000-10,000.....	by \$500s
\$10,000-20,000.....	by \$1,000s
\$20,000-50,000.....	by \$2,000/5,000/8,000s
\$50,000-100,000.....	by \$5,000s
\$100,000-200,000.....	by \$10,000s
above \$200,000.....	at auctioneer's discretion

The auctioneer may split or reject any bid at any time at his or her discretion as outlined in the Conditions of Sale.

Currency Converter

Solely for the convenience of bidders, a currency converter may be provided at Bonhams' auctions. The rates quoted for conversion of other currencies to U.S. Dollars are indications only and should not be relied upon by a bidder, and neither Bonhams nor its agents shall be responsible for any errors or omissions in the operation or accuracy of the currency converter.

Buyer's Premium

A buyer's premium is added to the winning bid price of each individual lot purchased, at the rates set forth in the Conditions of Sale. The winning bid price plus the premium constitute the purchase price for the lot. Applicable sales taxes are computed based on this figure, and the total becomes your final purchase price.

Unless specifically illustrated and noted, fine art frames are not included in the estimate or purchase price. Bonhams accepts no liability for damage or loss to frames during storage or shipment.

All sales are final and subject to the Conditions of Sale found in our catalogs, on our website, and available at the reception desk.

Payment

Payment may be made to Bonhams by cash, checks drawn on a U.S. bank, money order, wire transfer, or by Visa, MasterCard, American Express or Discover credit or charge card or debit card. All items must be paid for within 5 business days of the sale. Please note that payment by personal or business check may result in property not being released until purchase funds clear our bank. For payments sent by mail, please remit to Bonhams Client Services Department, 7601 W Sunset Boulevard, Los Angeles, California 90046.

Sales Tax

Residents of states listed in Paragraph 1 of the Conditions of Sale must pay applicable sales tax. Other state or local taxes (or compensation use taxes) may apply. Sales tax will be automatically added to the invoice unless a valid resale number has been furnished or the property is shipped via common carrier to destinations outside the states listed in the Conditions of Sale. If you wish to use your resale license please contact Client Services for our form.

Collection of Purchases

Scheduling an appointment and payment in full prior to arrival will facilitate the quick release of your property. If you are sending a third-party to collect, please provide details to our Client Services Department at invoices.us@bonhams.com prior to your scheduled pickup or we will be unable to release your property.

For your convenience, pre-allocated 30-minute collection time slots are available Monday through Friday between 9am – 4:30pm. To schedule collection of purchases, please contact our Client Services Department on +1 (323) 850 7500.

Shipping & Removal

Bonhams can accommodate shipping for certain items. If you wish to receive a Bonhams Shipping quote, please confirm as such at the time of registration. Carriers are not permitted to deliver to PO boxes.

International buyers are responsible for all import/export customs duties and taxes. An invoice stating the actual purchase price will accompany all international purchases.

Handling and Storage Charges

Storage charges of \$5 per lot, per day will begin accruing for any lots not collected within 14 calendar days of the auction.

Bonhams reserve the right to remove uncollected sold lots to the warehouse of our choice at the buyer's risk and expense. Further transfer, handling, storage and full value protection fees will apply if move to a warehouse of our choice.

Oversized (W) Lots – Collection and Storage

Please note that all lots marked with a **W** in the catalogue are oversized and subject to additional storage and shipping methods. All additional lots purchased with **W** lots are considered group lots and will be subject to the same terms as **W** lots.

We encourage you to collect **W** lots from Bonhams by 5pm on Wednesday, 11 November to avoid accruing additional storage fees. If failed to collect by the above date, **W** lots and additional purchases may be transferred to offsite storage at Box Pack & Ship on Thursday, 12 November at the purchaser's risk and expense. Please note, for sold lots removed to Box Pack & Ship there will be transfer and full value protection charges but no daily storage charges due for lots collected within 5 business days of the transfer.

The per-lot charges levied by Box Pack & Ship Services are as follows (plus any applicable sales tax):

FURNITURE/LARGE OBJECTS

Transfer \$85
Daily storage..... \$10
Insurance (on Hammer + Premium + tax) 0.9%

SMALL OBJECTS

Transfer \$42.50
Daily storage..... \$5
Insurance (on Hammer + Premium + tax) 0.9%

All purchases will be available for collection on Friday, 13 November from Box Pack & Ship. Collections appointments must be booked 24 hours in advance with Box Pack & Ship (subject to full payment of all outstanding amounts due to Bonhams and Box Pack & Ship).

For more information regarding storage, shipping, or collection from Box Pack & Ship please contact Box Pack & Ship directly at:

+1 323 432 2477 or **daniel@boxpackship.net**

Address:
3800 S. Main Street
Los Angeles, CA 90037

All amounts due to Bonhams and all charges due to Box Pack & Ship must be paid by the time of collection of the property. Payment may be made by cash, check, or credit card.

Oversized lots

83, 176

Auction Registration Form

(Attendee / Absentee / Online / Telephone Bidding)

Please circle your bidding method above.

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Paddle number (for office use only)

General Notice: This sale will be conducted in accordance with Bonhams Conditions of Sale, and your bidding and buying at the sale will be governed by such terms and conditions. Please read the Conditions of Sale in conjunction with the Buyer's Guide relating to this sale and other published notices and terms relating to bidding.

Payment by personal or business check may result in your property not being released until purchase funds clear our bank. Checks must be drawn on a U.S. bank.

Notice to Absentee Bidders: In the table below, please provide details of the lots on which you wish to place bids at least 24 hours prior to the sale. Bids will be rounded down to the nearest increment. Please refer to the Buyer's Guide in the catalog for further information relating to instructions to Bonhams to execute absentee bids on your behalf. Bonhams will endeavor to execute bids on your behalf but will not be liable for any errors or non-executed bids.

Notice to First Time Bidders: New clients are requested to provide photographic proof of ID - passport, driving license, ID card, together with proof of address - utility bill, bank or credit card statement etc. Corporate clients should also provide a copy of their articles of association / company registration documents, together with a letter authorizing the individual to bid on the company's behalf. Failure to provide this may result in your bids not being processed. For higher value lots you may also be asked to provide a bankers reference.

Notice to online bidders; If you have forgotten your username and password for www.bonhams.com, please contact Client Services.

If successful

- I will collect the purchases myself
- Please contact me with a shipping quote (if applicable)
- I will arrange a third party to collect my purchase(s)

Please email the completed Registration Form and requested information to:

Bonhams Client Services Department
 7601 W. Sunset Blvd
 Los Angeles, California 90046
 Tel +1 (323) 850 7500
bids.us@bonhams.com



Sale title: History of Science and Technology, including Air and Space		Sale date: 5 November, 2020	
Sale no. 26078		Sale venue: Los Angeles	
General Bid Increments:			
\$10 - 200by 10s		\$10,000 - 20,000by 1,000s	
\$200 - 500by 20 / 50 / 80s		\$20,000 - 50,000by 2,000 / 5,000 / 8,000s	
\$500 - 1,000by 50s		\$50,000 - 100,000by 5,000s	
\$1,000 - 2,000by 100s		\$100,000 - 200,000by 10,000s	
\$2,000 - 5,000by 200 / 500 / 800s		above \$200,000at the auctioneer's discretion	
\$5,000 - 10,000by 500s		The auctioneer has discretion to split any bid at any time.	
Customer Number		Title	
First Name		Last Name	
Company name (to be invoiced if applicable)			
Address			
City		County / State	
Post / Zip code		Country	
Telephone mobile		Telephone daytime	
Telephone evening			
Telephone bidders: indicate primary and secondary contact numbers by writing ① or ② next to the telephone number.			
E-mail (in capitals) _____			
By providing your email address above, you authorize Bonhams to send you marketing materials and news concerning Bonhams and partner organizations. Bonhams does not sell or trade email addresses.			
I am registering to bid as a private client <input type="checkbox"/>		I am registering to bid as a trade client <input type="checkbox"/>	
Resale: please enter your resale license number here _____ We may contact you for additional information.			

SHIPPING	
Shipping Address (if different than above):	
Address: _____	Country: _____
City: _____	Post/ZIP code: _____

Please note that all telephone calls are recorded.

Type of bid (A-Absentee, T-Telephone)	Lot no.	Brief description (In the event of any discrepancy, lot number and not lot description will govern.) If you are bidding online there is no need to complete this section.	MAX bid in US\$ (excluding premium and applicable tax) Emergency bid for telephone bidders only*

You instruct us to execute each absentee bid up to the corresponding bid amount indicated above.

* Emergency Bid: A maximum bid (exclusive of Buyer's Premium and tax) to be executed by Bonhams only if we are unable to contact you by telephone or should the connection be lost during bidding.

BY SIGNING THIS FORM YOU AGREE THAT YOU HAVE READ AND UNDERSTAND OUR CONDITIONS OF SALE AND SHALL BE LEGALLY BOUND BY THEM, AND YOU AGREE TO PAY THE BUYER'S PREMIUM, ANY APPLICABLE TAXES, AND ANY OTHER CHARGES MENTIONED IN THE BUYER'S GUIDE OR CONDITIONS OF SALE. THIS AFFECTS YOUR LEGAL RIGHTS.	
Your signature: _____	Date: _____



Bonhams
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Los Angeles, California 90046

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bonhams.com

AUCTIONEERS SINCE 1793