

**COTCHETT, PITRE & MCCARTHY, LLP**

Anne Marie Murphy (SBN 202540)  
Mark C. Molumphy (SBN 168009)  
Tyson C. Redenbarger (SBN 294424)  
San Francisco Airport Office Center  
840 Malcolm Road, Suite 200  
Burlingame, CA 94010  
Telephone: (650) 697-6000  
Facsimile: (650) 697-0577  
*amurphy@cpmlegal.com*  
*mmolumphy@cpmlegal.com*  
*tredenbarger@cpmlegal.com*

**KAPLAN FOX & KILSHEIMER LLP**

Matthew B. George (SBN 239322)  
Kathleen A. Herkenhoff (SBN 168562)  
Laurence D. King (SBN 206423)  
1999 Harrison Street, Suite 1560  
Oakland, CA 94612  
Telephone: 415-772-4700  
Facsimile: 415-772-4707  
*mgeorge@kaplanfox.com*  
*kherkenhoff@kaplanfox.com*  
*lking@kaplanfox.com*

Interim Co-Lead Counsel for Plaintiffs

**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA**

In Re: Robinhood Outage Litigation

Master File No. 3:20-cv-01626-JD

CLASS ACTION

**DECLARATION OF SCOTT WALSTER  
IN SUPPORT OF PLAINTIFFS' NOTICE  
OF MOTION AND MOTION FOR FINAL  
APPROVAL OF CLASS ACTION  
SETTLEMENT**

Date: June 15, 2023  
Time: 10:00 a.m.  
Judge: Hon. James Donato  
Ctrm: 11, 19th Floor

1 I, Scott Walster, declare and state as follows:

2 I have personal knowledge of the facts stated herein and if called upon as a witness, could  
3 and would testify to the facts set forth herein. I submit this Declaration in Support of Plaintiffs'  
4 Motion for Preliminary Approval of the Class Action Settlement.

5 1. I have been retained as a consultant and testifying expert in this matter by co-lead interim  
6 class counsel Kaplan Fox & Kilsheimer, LLP and Cotchett, Pitre & McCarthy, LLP ("Class  
7 Counsel"). I am being assisted in this matter by staff from Global Economics Group, LLC ("Global  
8 Economics Group") who have worked under my direction and supervision. Global Economics  
9 Group is being compensated at an hourly rate of \$550 per hour for my work in this matter.

10 2. I am a Principal at Global Economics Group, a financial consulting firm that specializes in  
11 the application of economics, finance, and valuation principles to questions that arise in both  
12 litigation and non-litigation contexts. Prior to joining Global Economics Group, I was an Assistant  
13 Director in the Division of Economic Risk Analysis at the United States Securities and Exchange  
14 Commission ("SEC"). I worked in the SEC's Office of Litigation Economics where I performed  
15 financial and economic analyses to assist the SEC with its investigations, litigations, and settlement  
16 negotiations on its enforcement actions. My work at the SEC focused on the economics of market  
17 manipulations; insider trading; securities lending; corporate disclosure; broker-dealer violations;  
18 and investment adviser frauds. I provided economic advice to help the SEC determine investor  
19 damages, ill-gotten gains, corporate penalties, as well as, to distribute money back to investors  
20 through Fair Funds.

21 3. On June 25, 2021, I submitted a report in this case setting forth proposed damages  
22 methodologies for the Robinhood accountholders at the time of the March 2020 Outages. I also sat  
23 for a deposition in this case in September of 2021. As outlined in my report, we obtained and  
24 analyzed a sample of Robinhood account holders' data before, during, and after the Outages.

25 4. A portion of my report set forth an "Ex Post" analysis that measured the economic losses  
26 depending on the actual price movements of their investments during the Outages and the limited  
27 trading data available from before, during, and just after the Outages. As part of the Ex Post

28

1 analysis, my report analyzed three categories of losses pertinent to the proposed Settlement  
2 Agreement.

3 a. The first category considered whether trades were placed on March 3, 2020, at a loss  
4 relative to the Volume Weighted Average Price “(VWAP)” of those positions during  
5 the March 2 and 3, 2020 Outages. The proposed losses for this group look at what  
6 pricing movements took place during the Outages and what trading activity occurred  
7 on March 3 after the Outages to determine whether Settlement Class Members had  
8 actual realized losses because of their inability to close positions at better prices  
9 during the Outages. Based on my analysis of a sample of data produced for  
10 Robinhood customers, I estimated 103,844 accounts experienced losses totaling  
11 \$12,148,378.

12 b. The second category includes any person who held a SPDR S&P 500 (“SPY”)  
13 option position expiring on March 2, 2020, and experienced a loss relative to the  
14 VWAP of those options during the March 2, 2020 Outage. Based on my analysis of  
15 a sample of data for Robinhood customers, I estimated 6,022 accounts with this  
16 trading history experienced losses totaling \$730,201.

17 c. The third category includes any person who had placed an equity trade that became  
18 marketable during the Outages but did not execute and the investor experienced a  
19 loss relative to the price at the end of the Outages and/or the transaction price  
20 eventually obtained within the day after the Outage. Based on my analysis of a  
21 sample of data for Robinhood customers, I estimated 46,793 accounts with this  
22 trading history experienced losses totaling \$7,527,561.

23 5. I am informed and understand that a proposed Settlement Agreement has been reached in  
24 this matter and I consulted with Class Counsel on the proposed Plan of Allocation, a copy of which  
25 is attached hereto as **Exhibit 1**. The proposed Plan of Allocation contemplates implementing the  
26 same methodologies for determining the Settlement Payments to Settlement Class Members as set  
27 forth in my prior report and described above in paragraph 4 as the “Ex Post” measures of losses.

1 6. I assisted Class Counsel in determining the Customer Trading Information necessary to  
2 perform the analysis described in the Plan of Allocation. After preliminary approval was granted,  
3 Global Economics Group received the Customer Trading Information negotiated in the Settlement  
4 Agreement so that we could perform the necessary analyses stated in the Plan of Allocation. Given  
5 our prior work on this matter and our familiarity the form and content of Robinhood’s data and  
6 third-party market data, we developed a work flow, programming, and quality controls, that were  
7 used in an efficient manner to implement the Plan of Allocation.

8 7. In January of 2023, we successfully completed our analysis and transmitted the results of  
9 our work to Epiq, the Settlement Administrator. The results of our work were very close to the  
10 estimates I previously provided the Court. As stated above in paragraph 4, my expert report  
11 estimated that there were approximately 150,000 class members with approximately \$20.4 million  
12 in calculated losses. At the conclusion of my analysis, we determined that there are 146,418 Class  
13 Members with \$20,555,558.36 in calculated losses. Per the Plan of Allocation at paragraph 7, after  
14 we subtracted out remediation credits provided by Robinhood (sometimes referred to as a  
15 “Goodwill” credit), there are \$19,212,278.13 in calculated losses that were used to determine the  
16 pro rata settlement payments to class members.

17 8. Should final approval be granted, I will need to perform some minimal, final work to  
18 determine the final settlement payment distributions once the opt-outs are identified and the amount  
19 of attorneys’ fees are determined. I estimate that this work will cost no more than \$2,500.00. As  
20 we have throughout this case, we will keep billing records of all time spent on this matter and will  
21 invoice Class Counsel on a monthly basis.

22 I declare under penalty of perjury that the foregoing is true and correct. Executed on this  
23 27th day of March, 2023, in Chicago, Illinois.

24 Scott Walster  
25 Scott Walster (Mar 27, 2023 08:36 CDT)  
26 Scott Walster  
27

# **Exhibit 1**

***In re Robinhood Outage Litigation, No. 3:20-cv-01626-JD (N.D. Cal)***

Plan of Allocation of Settlement Payments

The objective of the Plan of Allocation is to equitably distribute the Net Settlement Fund among Settlement Class Members who engaged in Qualifying Trades based on their respective alleged economic losses under Plaintiffs' damages theories.

To determine each Settlement Class Members' Settlement Payment, Plaintiffs' expert(s), Global Economics Group, will use the data provided by Robinhood to calculate Settlement Payments in accordance with the methods set forth in the Ex-post Economic Losses section of the expert report of Scott E. Walster (Dkt. No. 136-67) as outlined and modified below:

1. For Settlement Class Members who closed all or a portion of a Position on March 3, 2020, the VWAP(s) for the corresponding security(s) on March 2-3, 2020 will be determined from available market data. A "Position" is defined as a Settlement Class Members' combined equity and option holdings in the same underlying security. The Settlement Class Member's loss/gain for each security shall be determined as the difference between the price of the trade and the VWAP multiplied by the number of shares traded or the number of underlying shares represented by the option contract(s) traded.
2. For Settlement Class Members who held a SPDR S&P 500 ("SPY") option Position expiring on March 2, 2020, the loss/gain for each option shall be calculated as the value of the investment based on the VWAP during the March 2, 2020 Outage less any loss/gain resulting from the difference between the strike price and the underlying SPY price for in-the-money options at expiration on March 2, 2020.
3. For Settlement Class Members who experienced a Failed Equity Trade of a marketable order during the March 2 and 3 Outages the loss/gain shall be calculated as the difference between the price obtained when executing the transaction once the Outage ended through March 4, 2020 and the price of the failed transaction once it became marketable multiplied by the number of shares traded or the number of underlying shares represented by the option contract(s) traded. For Settlement Class Members who experienced a Failed Equity Trade of a marketable order during the March 9 Outage the loss/gain shall be calculated as the difference between the price obtained when executing the transaction once the Outage ended through March 10, 2020 and the price of the failed transaction once it became marketable multiplied by the number of shares traded or the number of underlying shares represented by the option contract(s) traded. If a new price for the failed transaction was not obtained through March 4, 2020 or March 10, 2020, respectively, the loss/gain shall be determined as the difference between the price of the security once the corresponding Outage ended and the price of the failed transaction multiplied by the number of shares traded or the number of underlying shares represented by the option contract(s) traded.
4. For Settlement Class Members that held multiple investments or experienced multiple Failed Equity Trades pertaining to the same underlying security, the Settlement Payment will be based on the net loss/gain for eligible activity calculated under 1, 2, or 3. Only Settlement Class Members with a net loss with 1, 2, or 3 are eligible for a Settlement Payment.

5. In the event that minute-by-minute market pricing data is not available for a particular security, including over-the-counter securities (“OTC Securities”), the Settlement Payment shall be determined using the daily VWAP price for March 2, 2020.
6. Should any specific trade be eligible for a Settlement Payment under 1 or 2 and 3 specified above, the Settlement Class Member shall be entitled to the highest payment but not both.
7. All Settlement Payments will be offset by any payments made to the Settlement Class Member paid by Robinhood as a result of its Goodwill Program pertaining to the March 2020 Outages. The offset may extinguish a Settlement Class Members’ Settlement Payment.
8. After the calculation of Settlement Payment set forth above, all Settlement Payments will be reduced *pro rata* relative to the estimated Net Settlement Fund.