Order Routing

Report Period: 2nd QTR, 2019

Securities Listed on NYSE

Summary Statistics:

(As percentage of total customer orders and non-directed orders)

Order Type	Percentage
Non-directed	100%
Market orders	0%
Limit orders	0%
Other orders	100%

Venues Receiving Significant Percentage of Total Non-Directed Orders:

Venue	Percentage
Citadel Securities, LLC	34.14%
Clearpool Execution Services, LLC	16.04%
VIRTU Financial Capital Markets LLC	11.77%
FIS Brokerage & Securities Services, LLC	11.37%
Archipelago Stock Exchange	5.24%
UBS Securities, LLC	5.14%

Information Concerning Significant Venues Types of Orders Routed to Venue:

		Market Orders		Other Orders	Material Aspects of Relationship w/ this Venue
1	Citadel Securities, LLC	0.00%	0.00%	100.00%	JonesTrading is party to Citadel's standard Schedule of Transaction Fees for US broker dealers. Citadel will pass along rebates it receives for executions and reduce the amount of transaction fees owed to them.
2	Clearpool Execution Services, LLC	0.00%	0.00%	100.00%	JonesTrading is party to Clearpool's standard Schedule of Transaction Fees for US broker dealers. Clearpool will pass along rebates it receives for executions and reduce the amount of transaction fees owed to them.
3	VIRTU Financial Capital Markets LLC	0.00%	0.00%	100.00%	JonesTrading is party to VIRTU's standard Schedule of Transaction Fees for US broker dealers. VIRTU will pass along rebates it receives

					for executions and reduce the amount of transaction fees owed to them.
4	FIS Brokerage & Securities Services, LLC	0.00%	0.00%	100.00%	JonesTrading is party to FIS's standard Schedule of Transaction Fees for US broker dealers. FIS will pass along rebates it receives for executions and reduce the amount of transaction fees owed to them
5	Archipelago Stock Exchange	0.00%	0.00%	100.00%	JonesTrading is party to Archipelago's standard Schedule of Transaction Fees for US broker dealers. Archipelago will pass along rebates it receives for executions and reduce the amount of transaction fees owed to them.
6	UBS Securities, LLC	0.00%	0.00%	100.00%	JonesTrading does not have a profit sharing arrangement with or receive payment for order flow from this venue/market center.

Securities Listed on NASDAQ

Summary Statistics:

(As percentage of total customer orders and non-directed orders):

Order Type	Percentage
Non-directed	100%
Market orders	0%
Limit orders	0%
Other orders	100%

Venues Receiving Significant Percentage of Total Non-Directed Orders:

Venue	Percentage
VIRTU Financial Capital Markets LLC	48.17%
NASDAQ	21.71%
ITG, Inc.	7.82%
Clearpool Execution Services, LLC	7.60%
Archipelago Stock Exchange	6.91%
FIS Brokerage & Securities Services, LLC	6.85%

Information Concerning Significant Venues Types of Orders Routed to Venue:

		Market Orders	Limit Orders	Other Orders	Material Aspects of Relationship w/ this Venue
11	VIRTU Financial Capital Markets LLC	0.00%	0.00%	100.00%	JonesTrading is party to VIRTU's standard Schedule of Transaction Fees for US broker dealers. VIRTU will pass along rebates it receives

					for executions and reduce the amount of transaction fees owed to them.
2	NASDAQ	0.00%	0.00%	100.00%	JonesTrading is party to NASDAQ's standard Schedule of Transaction Fees for US broker dealers. NASDAQ will pass along rebates it receives for executions and reduce the amount of transaction fees owed to them.
3	ITG, Inc.	0.00%	0.00%	100.00%	JonesTrading does not have a profit sharing arrangement with or receive payment for order flow from this venue/market center.
4	Clearpool Execution Services, LLC	0.00%	0.00%	100.00%	JonesTrading is party to Clearpool's standard Schedule of Transaction Fees for US broker dealers. Clearpool will pass along rebates it receives for executions and reduce the amount of transaction fees owed to them
5	Archipelago Stock Exchange	0.00%	0.00%	100.00%	JonesTrading is party to Archipelago's standard Schedule of Transaction Fees for US broker dealers. Archipelago will pass along rebates it receives for executions and reduce the amount of transaction fees owed to them.
6	FIS Brokerage & Securities Services, LLC	0.00%	0.00%	100.00%	JonesTrading is party to FIS's standard Schedule of Transaction Fees for US broker dealers. FIS will pass along rebates it receives for executions and reduce the amount of transaction fees owed to them

Securities Listed on AMEX/OTHER Exchanges

Summary Statistics: (As percentage of total customer orders and non-directed orders):

Order Type	Percentage
Non-directed	100%
Market orders	0%
Limit orders	0%
Other orders	100%

Venues Receiving Significant Percentage of Total Non-Directed Orders:

Venue	Percentage
Citadel Securities, LLC	34.00%
Clearpool Execution Services, LLC	18.16%
UBS Securities, LLC	11.14%
VIRTU Financial Capital Markets LLC	9.03%

Bank of America Merrill Lynch	5.66%
-------------------------------	-------

Information Concerning Significant Venues Types of Orders Routed to Venue:

		Market Orders	Limit Orders	Other Orders	Material Aspects of Relationship w/ this Venue
1	Citadel Securities, LLC	0.00%	0.00%	100.00%	JonesTrading is party to Citadel's standard Schedule of Transaction Fees for US broker dealers. Citadel will pass along rebates it receives for executions and reduce the amount of transaction fees owed to them.
2	Clearpool Execution Services, LLC	0.00%	0.00%	100.00%	JonesTrading is party to Clearpool's standard Schedule of Transaction Fees for US broker dealers. Clearpool will pass along rebates it receives for executions and reduce the amount of transaction fees owed to them.
3	UBS Securities, LLC	0.00%	0.00%	100.00%	JonesTrading does not have a profit sharing arrangement with or receive payment for order flow from this venue/market center.
4	VIRTU Financial Capital Markets LLC	0.00%	0.00%	100.00%	JonesTrading is party to VIRTU's standard Schedule of Transaction Fees for US broker dealers. VIRTU will pass along rebates it receives for executions and reduce the amount of transaction fees owed to them
5	Bank of America Merrill Lynch	0.00%	0.00%	100.00%	JonesTrading does not have a profit sharing arrangement with or receive payment for order flow from this venue/market center.

Exchange Listed Options

Summary Statistics: (As percentage of total customer orders and non-directed orders):

Order Type	Percentage
Non-directed	100%
Market orders	0%
Limit orders	0%
Other orders	100%

Venues Receiving Significant Percentage of Total Non-Directed Orders:

Venue	Percentage
PCX (P) Pacific Exchange	49.11%
DASH (D) Dash Financial Options	34.14%
CBOE (C) Chicago Board Options Exchange	13.70%

Information Concerning Significant Venues Types of Orders Routed to Venue:

		Market Orders	Limit Orders	Other Orders	Material Aspects of Relationship w/ this Venue
1	PCX (P) Pacific Exchange	0.00%	0.00%	100.00%	JonesTrading does not have a profit sharing arrangement with or receive payment for order flow from this venue/market center.
2	DASH (D) Dash Financial Options	0.00%	0.00%	100.00%	JonesTrading does not have a profit sharing arrangement with or receive payment for order flow from this venue/market center.
3	CBOE (C) Chicago Board Options Exchange	0.00%	0.00%	100.00%	JonesTrading does not have a profit sharing arrangement with or receive payment for order flow from this venue/market center.

Upon request, JonesTrading will provide to customers information on the order routing of their orders pursuant to SEC Rule 606. Customers may submit a request for a written copy of the report by emailing compliance@jonestrading.com.

Customers may request the identity of the venue where specific orders were routed for execution for any order in the previous six (6) months by sending a written request to:

JonesTrading Institutional Services Attn: Compliance Department 32133 Lindero Canyon Road Suite 208 Westlake Village, CA 91361

Please include the security and trade date with your request.