UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-Q

(Mark One)

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.**

For the quarterly period ended June 30, 2022

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.**

For the transition period from ____ to _____
Commission file number: 1-16525

CVD EQUIPMENT CORPORATION

(Name of Registrant in Its Charter)

New York — ***State or Other Jurisdiction of Incorporation or Organization)***

11-2621692 — ***(I.R.S. Employer Identification No.)***

355 South Technology Drive Central Islip, New York 11722

(Address of principal executive offices)

(631) 981-7081
(Registrant's Telephone Number, Including Area Code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	CVV	NASDAQ Capital Market

Indicate by check whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No☐

Indicate by check mark whether registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act).

Large accelerated filer ☐ Accelerated filer ☐
Non-accelerated filer ☑ Smaller reporting company ☑ Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☑

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date: 6,728,938 shares of Common Stock, $0.01 par value at August 8, 2022.

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES

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PART 1 – FINANCIAL INFORMATION
Item 1 – Financial Statements
CVD EQUIPMENT CORPORATION AND SUBSIDIARIES
Condensed Consolidated Balance Sheets

	(Unaudited) June 30, 2022	December 31, 2021
ASSETS		
Current assets		
Cash and cash equivalents	$ 12,159,052	$ 16,651,371
Accounts receivable, net	2,572,192	1,446,354
Contract assets	4,255,400	2,538,373
Inventories, net	2,050,405	1,225,015
Taxes receivable	-	715,599
Other current assets	529,264	493,788
Total current assets	21,566,313	23,070,500
Property, plant and equipment, net	12,334,374	12,261,321
Intangible assets, net	205,258	182,838
Other assets	9,570	9,570
Total assets	$ 34,115,515	$ 35,524,229
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 1,422,072	$ 1,161,381
Accrued expenses	1,857,317	1,758,939
Current maturities of long-term debt	-	1,765,508
Contract liabilities	3,296,062	1,650,426
Total current liabilities	6,575,451	6,336,254
Total liabilities	6,575,451	6,336,254
Stockholders' Equity:		
Common stock - $0.01 par value – 20,000,000 shares authorized; issued and outstanding 6,728,938 at June 30, 2022 and 6,723,438 at December 31, 2021	67,289	67,234
Additional paid-in capital	27,465,930	27,277,154
Retained earnings	6,845	1,843,587
Total stockholders' equity	27,540,064	29,187,975
Total liabilities and stockholders' equity	$ 34,115,515	$ 35,524,229

The accompanying notes are an integral part of these condensed consolidated financial statements

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES
Condensed Consolidated Statements of Operations
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Revenue	$ 5,808,588	$ 4,034,408	$ 10,460,820	$ 7,400,268
Cost of revenue	4,367,472	3,037,280	8,253,647	5,958,834
Gross profit	1,441,116	997,128	2,207,173	1,441,434
Operating expenses				
Research and development	569,194	430,754	879,401	741,708
Selling and shipping	332,261	229,147	604,940	364,902
General and administrative	1,396,506	1,420,151	2,589,955	3,036,535
Total operating expenses	2,297,961	2,080,052	4,074,296	4,143,145
Operating loss	(856,845)	(1,082,924)	(1,867,123)	(2,701,711)
Other income (expense):				
Interest income	12,647	403	30,929	1,626
Interest expense	-	(107,000)	(5,344)	(214,221)
Gain on debt extinguishment	-	2,443,418	-	2,443,418
Other income	5,621	217,592	5,621	436,827
Total other income, net	18,268	2,554,413	31,206	2,667,650
(Loss) income before income tax	(838,577)	1,471,489	(1,835,917)	(34,061)
Income tax expense	825	1,064	825	1,064
Net (loss) income	$ (839,402)	$ 1,470,425	$ (1,836,742)	$ (35,125)
Basic (loss) income per common share	$ (0.12)	$ 0.22	$ (0.27)	$ (0.01)
Diluted (loss) income per common share	$ (0.12)	$ 0.22	$ (0.27)	$ (0.01)
Weighted average common shares Outstanding-basic	6,728,938	6,684,281	6,726,990	6,682,347
Weighted average common shares Outstanding-diluted	6,728,938	6,687,229	6,726,990	6,682,347

The accompanying notes are an integral part of these condensed consolidated financial statements

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES
Condensed Consolidated Statements of Changes in Stockholders' Equity
(Unaudited)

Three months ended June 30, 2022 and 2021

	Common stock				
	Shares	**Par Value**	**Additional paid-in Capital**	**Retained Earnings/ (Accumulated Deficit)**	**Total**
Balance at April 1, 2022	6,728,938	$ 67,289	$ 27,374,209	$ 846,247	$ 28,287,745
Net loss	-	-	-	(839,402)	(839,402)
Stock-based compensation	-	-	91,721	-	91,721
Balance at June 30, 2022	6,728,938	$ 67,289	$ 27,465,930	$ 6,845	$ 27,540,064
Balance at April 1, 2021	6,684,281	$ 66,842	$ 27,012,001	$ (4,408,448)	$ 22,670,395
Net income	-	-	-	1,470,425	1,470,425
Stock-based compensation	-	-	62,078	-	62,078
Balance at June 30, 2021	6,684,281	$ 66,842	$ 27,074,079	$ (2,938,023)	$ 24,202,898

Six months ended June 30, 2022 and 2021

	Common stock				
	Shares	**Par Value**	**Additional paid-in Capital**	**Retained Earnings / (Accumulated Deficit)**	**Total**
Balance at January 1, 2022	6,723,438	$ 67,234	$ 27,277,154	$ 1,843,587	$ 29,187,975
Net loss	-	-	-	(1,836,742)	(1,836,742)
Stock-based compensation	5,500	55	188,776	-	188,831
Balance at June 30, 2022	6,728,938	$ 67,289	$ 27,465,930	$ 6,845	$ 27,540,064
Balance at January 1, 2021	6,678,698	$ 66,786	$ 26,961,684	$ (2,902,898)	$ 24,125,572
Net loss	-	-	-	(35,125)	(35,125)
Stock-based compensation	5,583	56	112,395	-	112,451
Balance at June 30, 2021	6,684,281	$ 66,842	$ 27,074,079	$ (2,938,023)	$ 24,202,898

The accompanying notes are an integral part of these condensed consolidated financial statements

CVD EQUIPMENT CORPORATION AND SUBSIDIARIES
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Six Months Ended June 30, 2022	2021
Cash flows from operating activities:		
Net loss	$ (1,836,742)	$ (35,125)
Adjustments to reconcile net loss to net cash used in operating activities:		
Gain on debt extinguishment	-	(2,443,418)
Stock-based compensation	188,831	112,451
Depreciation and amortization	402,305	429,195
(Increase)/decrease in operating assets:		
Accounts receivable	(1,125,838)	(99,723)
Contract assets	(1,717,027)	(572,101)
Inventories	(825,390)	(173,363)
Tax receivable	715,599	-
Other current assets	(35,476)	239,345
Increase/(decrease) in operating liabilities:		
Accounts payable	260,691	92,798
Accrued expenses	98,378	384,654
Contract liabilities	1,645,636	214,414
Total adjustments	(392,291)	(1,815,748)
Net cash used in operating activities	(2,229,033)	(1,850,873)
Cash flows from investing activities:		
Net proceeds from sale of assets	10,000	-
Capitalized patents costs	(47,423)	-
Capital expenditures	(460,355)	(118,471)
Net cash used in investing activities	(497,778)	(118,471)
Cash flows from financing activities		
Payments of long-term debt	(1,765,508)	(342,095)
Net cash used in financing activities	(1,765,508)	(342,095)
Net decrease in cash and cash equivalents	(4,492,319)	(2,311,439)
Cash and cash equivalents at beginning of period	16,651,371	7,699,335
Cash and cash equivalents at end of period	$ 12,159,052	$ 5,387,896
Supplemental disclosure of cash flow information:		
Income taxes paid	$ -	$ 1,064
Interest paid	$ 8,157	$ 214,221

The accompanying notes are an integral part of these condensed consolidated financial statements

NOTE 1:

BASIS OF PRESENTATION

The accompanying unaudited condensed consolidated financial statements for CVD Equipment Corporation and Subsidiaries (collectively "the Company") have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions to Form 10-Q and Article 8 of Regulation S-X. They do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary in order to make the interim financials not misleading have been included and all such adjustments are of a normal recurring nature. The operating results for the three and six months ended June 30, 2022 are not necessarily indicative of the results that can be expected for the year ending December 31, 2022.

The condensed consolidated balance sheet as of December 31, 2021 has been derived from the audited consolidated financial statements at such date, as filed on Form 10-K with the SEC on March 31, 2022, but does not contain all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete financial statements. These unaudited condensed consolidated financial statements should be read in conjunction with that report.

All material intercompany balances and transactions have been eliminated in consolidation. In addition, certain reclassifications have been made to the prior period condensed consolidated financial statements to conform to the current period presentation. These reclassifications had no effect on net income (loss).

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Revenue Recognition

In accordance with FASB ASC 606 - Revenue from Contracts with Customers ("ASC 606"), the Company records revenue in an amount that reflects the consideration to which the Company expects to be entitled in exchange for goods or services promised to its customers. Under ASC 606, the Company follows a five-step model to: (1) identify the contract with the customer; (2) identify the performance obligations in the contract; (3) determine the transaction price for the contract; (4) allocate the transaction price to the performance obligations; and (5) recognize revenue using one of the following two methods:

Over time

The Company designs, manufactures and sells custom chemical vapor deposition equipment through contractual agreements. These system sales require the Company to deliver functioning equipment that is generally completed within three to eighteen months from commencement of order acceptance. The Company recognizes revenue from system sales over time by using an input method based on costs incurred as it depicts the Company's progress toward satisfaction of the performance obligation. Under this method, revenue arising from fixed price contracts is recognized as work is performed based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligations. Incurred costs include all direct material and labor costs and those indirect costs related to contract performance, such as supplies, tools, repairs and depreciation costs. Contract material costs are included in incurred costs when the project materials have been purchased or moved to work in process, and installed, as required by the project's engineering design. Cost based input methods of revenue recognition require the Company to make estimates of costs to complete the projects. In making such estimates, significant judgment is required to evaluate assumptions related to the costs to complete the projects, including materials, labor and other system costs. If the estimated total costs on any contract are greater than the net contract revenues, the Company recognizes the entire estimated loss in the period the loss becomes known and can be reasonably estimated.

"Contract assets," include unbilled amounts typically resulting from system sales under contracts and represents revenue recognized that exceeds the amount billed to the customer.

"Contract liabilities," include advance payments and billings in excess of revenue recognized. The Company typically receives down payments upon receipt of order and progress payments as the system is manufactured.

Contract assets and contract liabilities are classified as current as these contracts in progress are expected to be substantially completed within the next twelve months.

Point in time

For non-system sales of products and services, the revenue is recognized at the point in time when control of the promised products or services is transferred to the Company's customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those products or services (the transaction price). A performance obligation is a promise in a contract to transfer a distinct product or service to a customer and is the unit of account under ASC 606, "Revenue from Contracts with Customers".

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Recent Accounting Standards

In June 2016, the FASB issued Accounting Standard Update ("ASU") 2016-13, Financial Instruments – Credit Losses (Topic 326), which require that financial assets measured at amortized cost be presented at the net amount expected to be collected. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis of the financial asset to present the net carrying value at the amount expected to be collected. The income statement reflects the measurement of credit losses for newly recognized financial assets, as well as the increase or decreases of expected credit losses that have taken place during the period. The measurement of expected credit losses is based upon historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. On November 15, 2019, the FASB delayed the effective date for smaller reporting companies. The amendments in this update are now effective for fiscal years beginning after December 15, 2022 and interim periods within those annual periods. Management is currently evaluating the effect of this update on the Company's consolidated financial statements and currently believes it should not have a material impact.

The Company believes there is no additional new accounting guidance adopted, but not yet effective that is relevant to the readers of its financial statements. However, there are numerous new proposals under development which, if and when enacted, may have a significant impact on our financial reporting.

NOTE 3: CONCENTRATION OF CREDIT RISK

Cash and cash equivalents

The Company had cash and cash equivalents of $12.2 million and $16.7 million at June 30, 2022 and December 31, 2021, respectively. The Company invests excess cash in U.S. treasury bills, certificates of deposit or deposit accounts, all with maturities of less than three months. Cash equivalents were $7.0 million at both June 30, 2022 and December 31, 2021.

The Company places most of its temporary cash investments with financial institutions, which from time to time may exceed the Federal Deposit Insurance Corporation limit. The amount at risk at June 30, 2022 and December 31, 2021 was $4.1 million and $8.6 million, respectively.

Sales concentration

Revenue from a single customer in any one period can exceed 10% of our total revenues. During the three months ended June 30, 2022, two customers exceeded 10% of revenues, representing 24.3% and 14.8% of revenues, and during the six months ended June 30, 2022 two customers exceeded 10%, representing 16.2% and 12.2% of revenues. During the three months ended June 30, 2021, three customers exceeded 10% of revenues, representing 17.3%, 12.9% and 11.2% of revenues, and during the six months ended June 30, 2021, one customer exceeded 10%, representing 18.0% of revenues.

NOTE 3: CONCENTRATION OF CREDIT RISK (continued)

Accounts receivable

The Company sells products and services to various companies across several industries in the ordinary course of business. The Company performs ongoing credit evaluations to assess the probability of accounts receivable collection based on a number of factors, including past transaction experience, evaluation of their credit history and review of the invoicing terms of the contract to determine the financial strength of its customers. The Company also maintains allowances for anticipated losses. At June 30, 2022, three customers exceeded 10% of the accounts receivable balance representing in the aggregate 54.1%, and at December 31, 2021 two customers exceeded 10% of the accounts receivable balance, representing in the aggregate 50.0% of the accounts receivable balance.

NOTE 4: REVENUE DISAGGREGATION

The following table represents a disaggregation of revenue for the three and six months ended June 30, 2022 and 2021 (in thousands):

	Three Month's Ending June 30, 2022		
	Over time	Point in time	Total
Aerospace	$ -	$ 520	$ 520
Energy, storage and transmission	2,024	219	2,243
Industrial	1,450	725	2,175
Research	299	572	871
Total	$ 3,773	$ 2,036	$ 5,809

	Three Month's Ending June 30, 2021		
	Over time	Point in time	Total
Aerospace	$ 197	$ 577	$ 774
Energy, storage and transmission	-	-	-
Industrial	1,226	1,293	2,519
Research	365	376	741
Total	$ 1,788	$ 2,246	$ 4,034

NOTE 4: REVENUE DISAGGREGATION (continued)

	Six Month's Ending June 30, 2022		
	Over time	Point in time	Total
Aerospace	$ -	$ 1,221	$ 1,221
Energy, storage and transmission	2,923	226	3,149
Industrial	2,446	1,597	4,043
Research	1,005	1,043	2,048
Total	$ 6,374	$ 4,087	$ 10,461

	Six Month's Ending June 30, 2021		
	Over time	Point in time	Total
Aerospace	$ 386	$ 1,102	$ 1,488
Energy, storage and transmission	-	-	-
Industrial	2,595	1,969	4,564
Research	552	796	1,348
Total	$ 3,533	$ 3,867	$ 7,400

The Company has unrecognized contract revenue of approximately $12.8 million at June 30, 2022, which it expects to substantially recognize as revenue within the next twelve months.

Judgment is required to evaluate assumptions including the amount of net contract revenues and the total estimated costs to determine our progress towards contract completion and to calculate the corresponding amount of revenue to recognize.

Changes in estimates for sales of systems occur for a variety of reasons, including but not limited to (i) build accelerations or delays, (ii) product cost forecast changes, (iii) cost related change orders or add-ons, or (iv) changes in other information used to estimate costs. Changes in estimates may have a material effect on the Company's consolidated statements of operations.

NOTE 4: REVENUE DISAGGREGATION (continued)

Contract Assets and Liabilities

During the six months ended June 30, 2022 and 2021, the increase in contract assets of approximately $1.7 million and $.6 million, respectively, was the result of work performed in excess of billings which are based upon project milestones.

Contract assets and contract liabilities on input method type contracts in progress are summarized as follows:

		2022
Costs incurred on contracts in progress	$	8,822,284
Estimated earnings		6,151,767
		14,974,051
Billings to date		(13,683,261)
	$	1,290,790
Deferred revenue related to non-systems contracts		(331,452)
		959,338
Included in accompanying balance sheets		
Under the following captions:		
Contract assets	$	4,255,400
Contract liabilities	$	(3,296,062)

NOTE 5: INVENTORIES, NET

Inventories consist of:

		June 30, 2022		December 31, 2021
Raw materials	$	1,366,405	$	1,030,955
Work-in-process		684,000		194,060
Inventories	$	2,050,405	$	1,225,015

NOTE 6: ACCOUNTS RECEIVABLE, NET

Accounts receivable are presented net of an allowance for doubtful accounts of approximately $36,000 and $59,000 as of June 30, 2022 and December 31, 2021, respectively. The allowance is based on prior experience and management's evaluation of the collectability of accounts receivable. Management believes the allowance is adequate. However, future estimates may change based on changes in future economic conditions.

NOTE 7: LONG-TERM DEBT

The Company had a loan agreement with HSBC which was secured by a mortgage against its Central Islip, NY Headquarters. The loan was payable in 120 consecutive equal monthly installments of $25,000 in principal plus interest and a final balloon payment upon maturity on March 1, 2022. The balance as of December 31, 2021 was approximately $1.8 million. Interest accrued on the Loan, at the Company's option, at the variable rate of LIBOR plus 1.75% or Prime less 0.5% (1.86% at December 31, 2021). According to the terms of the agreement the loan was satisfied on March 1, 2022.

NOTE 8: STOCK-BASED COMPENSATION EXPENSE

The Company recorded $91,721 and $188,831 during the three and six months ended June 30, 2022, respectively, and recorded $62,078 and $112,451 during the three and six months ended June 30, 2021, respectively, for the cost of employee and director services received in exchange for equity instruments based on the grant-date fair value of those instruments. The following table summarizes the compensation expense recorded for the three and six months ended June 30, 2022 and 2021 related to stock-based compensation.

	Three months ended June 30,		Six months ended June 30,	
	2022	2021	2022	2021
Cost of revenue	$ 8,440	$ -	$ 16,880	$ -
Research and development	13,417	-	26,316	-
Selling and shipping	5,398	-	10,796	-
General and administrative	64,466	62,078	134,839	112,451
Total	$ 91,721	$ 62,078	$ 188,831	$ 112,451

NOTE 8: STOCK-BASED COMPENSATION EXPENSE (continued)

A summary of the stock option activity related to the 2007 Share Incentive Plan and the 2016 Share Incentive Plan for the period from January 1, 2022 through June 30, 2022 are as follows:

2007 Share Incentive Plan

	Beginning Balance Outstanding	Granted During Period	Exercised During Period	Canceled During Period	Ending Balance Outstanding	Exercisable
Number of shares	220,000	-	-	(25,000)	195,000	195,000
Weighted average exercise price per share	$ 12.56	-	-	$ 15.00	$ 12.24	$ 12.24

2016 Share Incentive Plan

	Beginning Balance Outstanding	Granted During Period	Exercised During Period	Canceled During Period	Ending Balance Outstanding	Exercisable
Number of shares	398,500	12,500	-	(6,500)	404,500	102,500
Weighted average exercise price per share	$ 4.43	$ 4.60	-	$ 4.01	$ 4.44	$ 5.33

For the six months ended June 30, 2022, the Company granted 12,500 stock options, vesting 25% per year over four years, with a ten-year life. The Company determined the fair value of stock options granted during the six months ended June 30, 2022 was $2.81 and is based upon weighted average assumptions as provided below.

Stock Price	$ 4.60
Exercise Price	$ 4.60
Dividend yield	0%
Expected volatility	68%
Risk-Free interest rate	1.79%
Expected life (in years)	6.00

The Company has a total of 599,500 outstanding stock options, of which 297,500 were exercisable under the two plans at June 30, 2022.

NOTE 8: STOCK-BASED COMPENSATION EXPENSE (continued)

The following table summarizes information about the outstanding and exercisable options at June 30, 2022.

	Options Outstanding				Options Exercisable		
Exercise Price Range	Number Outstanding	Weighted Average Remaining Contractual	Weighted Average Exercise Price	Intrinsic Value	Number Exercisable	Weighted Average Exercise Price	Intrinsic Value
$4.00 - 7.00	384,500	8.8	$ 4.25	$ 0	82,500	$ 4.66	$ 0
$7.01 - 10.00	20,000	5.8	$ 8.07	$ 0	20,000	$ 8.07	$ 0
$10.01 - 12.00	120,000	4.7	$ 10.52	$ 0	120,000	$ 10.52	$ 0
$12.01 - 15.00	75,000	.2	$ 15.00	$ 0	75,000	$ 15.00	$ 0

No options were exercised during the six months ended June 30, 2022. As of June 30, 2022, there was $644,000 of unrecognized compensation costs related to stock options expected to be recognized over a weighted average period of 3.0 years.

Restricted Stock Awards

There were no unvested shares of restricted stock at June 30, 2022 and December 31, 2021. During the three and six months ended June 30, 2022 there were no grants of restricted stock.

Pursuant to the director compensation plan approved on October 11, 2021, each director is entitled to Director Compensation for an Annual Equity Retainer in the amount of $40,000, to be automatically granted on the date of the Company's annual meeting of shareholders. The directors may elect to receive payment in restricted stock, stock options or a combination thereof.

Restricted Stock Units

The following table summarizes activity related to outstanding restricted stock units for the six months ended June 30, 2022:

	Shares of Restricted Stock Units	Weighted Average Grant Date Fair Value
Unvested outstanding at December 31, 2021	5,500	$ 4.82
Granted	-	$ -
Vested	(5,500)	$ 4.82
Forfeited/Cancelled	-	$ - -
Unvested outstanding at June 30, 2022	-	$ -

The total fair value of vested restricted stock units was $3,458 for the six months ended June 30, 2022. As of June 30, 2022, there was no unrecognized compensation costs related to restricted stock units.

NOTE 9: INCOME TAXES

As of June 30, 2022 and December 31, 2021, the Company has provided a full valuation allowance against all of the net deferred tax assets. This was based on management's assessment, including the last two years of operating losses, that it is more likely than not that the net deferred tax assets may not be realized in the future. Management continues to evaluate for potential utilization of the Company's deferred tax asset, which has been fully reserved for, on a quarterly basis, reviewing our economic models, including projections and timing of orders, and cost containment measures.

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security Act (the "CARES Act") was enacted by the United States Congress. As a result of the enactment of the CARES Act, net operating losses ("NOL's") generated in 2018-2020 could be carried back for five years and resulted in the Company recognizing approximately $1.5 million of a tax benefit, of which $.7 million was a receivable at December 31, 2021. This tax receivable was collected in March 2022.

NOTE 10: EARNINGS PER SHARE

Basic earnings per share is computed by dividing net earnings available to common shareholders (the numerator) by the weighted average number of common shares outstanding (the denominator) for the period presented. The computation of diluted earnings per share is similar to basic earnings per share, except that the denominator is increased to include the number of additional common shares that would have been outstanding if the potentially dilutive common shares had been issued.

A reconciliation of basic to diluted shares used in the earnings per share calculation is as follows:

	Three months ended June 30,		Six months ended June 30,	
	2022	2021	2022	2021
Basic weighted average common shares outstanding	6,728,938	6,684,281	6,726,990	6,682,347
Dilutive effect of options and unvested restricted shares	-	2,948	-	-
Diluted weighted average shares outstanding	6,728,938	6,687,229	6,726,990	6,682,347

NOTE 10: EARNINGS PER SHARE (continued)

The following table represents common stock equivalents that were excluded from the computation of diluted earnings per share for the three and six months ended June 30, 2022 and 2021, because the effect of their inclusion would be anti-dilutive.

	Three months ended June 30,		Six months ended June 30,	
	2022	2021	2022	2021
Stock Options	599,500	557,052	599,500	560,000
	599,500	557,052	599,500	560,000

Stock options to purchase 599,500 shares of common stock were outstanding and 297,500 were exercisable during the three and six months ended June 30, 2022.

The dilutive potential common shares on options is calculated in accordance with the treasury stock method, which assumes that proceeds from the exercise of all options are used to repurchase common stock at market value. The number of shares remaining after the proceeds are exhausted represents the potential dilutive effect of the securities.

NOTE 11: SEGMENT REPORTING

The Company operates through three segments: CVD Equipment ("CVD"), Stainless Design Concepts ("SDC") and CVD Materials ("Materials"). The CVD segment manufactures and sells chemical vapor deposition equipment. SDC is the Company's ultra-high purity manufacturing division for gas control systems. The Materials segment provides material coatings for aerospace, medical, electronic and other applications. The Company evaluates performance based on several factors, of which the primary financial measure is income (loss) before taxes.

The Company's corporate administration activities are reported in the Eliminations and Unallocated column. These activities primarily include the elimination of intercompany sales and profit, expenses related to certain corporate officers and support staff, expenses related to the Company's Board of Directors, stock option expense for shares granted to corporate administration employees, certain consulting expenses, investor and shareholder relations activities, and all of the Company's legal, auditing and professional fees, and interest expense.

NOTE 11: SEGMENT REPORTING (continued)

Three Months Ended June 30,
(In thousands)

2022	CVD	SDC	Materials	Eliminations* and Unallocated	Consolidated
Assets	$ 23,661	$ 8,474	$ 1,913	$ 68	$ 34,116
Revenue	3,782	1,591	816	(380)	5,809
Operating (loss) income	(469)	227	143	(758)	(857)
Pretax (loss) income	(451)	227	143	(758)	(839)
2021					
Assets	$ 28,149	$ 6,765	$ 3,940	$ 66	$ 38,920
Revenue	1,804	1,162	1,087	(19)	4,034
Operating (loss) income	(1,220)	368	503	(734)	(1,083)
Pretax (loss) income	1,209	368	628	(734)	1,471

Six Months Ended June 30,
(In thousands)

2022	CVD	SDC	Materials	Eliminations* and Unallocated	Consolidated
Revenue	6,607	3,006	1,273	(425)	10,461
Operating (loss) income	(1,236)	670	137	(1,438)	(1,867)
Pretax (loss) income	(1,204)	670	136	(1.438)	(1,836)
2021					
Revenue	3,811	1,987	1,716	(114)	7,400
Operating (loss) income	(1,753)	363	392	(1,704)	(2,702)
Pretax (loss) income	661	363	646	(1,704)	(34)

*All elimination entries represent intersegment revenues eliminated in consolidation for external financial reporting.

Intersegment sales for the three months ended June 30, 2022 and 2021 by the SDC segment to the CVD Equipment segment were $.4 million and $.02 million, respectively. Intersegment sales for the six months ended June 30, 2022 and 2021 by the SDC segment to the CVD Equipment segment were $.4 million and $.1 million, respectively.

NOTE 12: SIGNIFICANT EVENTS- CORONAVIRUS (COVID-19)

The Company has been actively monitoring the coronavirus (COVID-19) outbreak and resulting pandemic and its impact on both the global economic and operating environment and specifically on its impact to the Company, its employees, its operations and its financial condition. In March 2020, the World Health Organization recognized the COVID-19 outbreak as a pandemic based on the global spread of the disease, the severity of illnesses it causes and its effects on society. In response to the COVID-19 outbreak, the governments of many countries, states, cities and other geographic regions have taken preventative or protective actions, such as imposing restrictions on travel and business operations, including complete or partial government shutdowns of many schools and businesses, including the Company, and advising or requiring individuals to limit or forego their time outside of their homes. Accordingly, the COVID-19 outbreak (including the impact of the COVID Omicron variant) has severely restricted the level of economic activity in many countries, including the United States, and continues to materially and adversely impact global economic activity. In particular, the aerospace sector, for which the Company relies on a significant part of its business, has been faced with significant reductions to its business due to reduced long distance air travel which has negatively affected new order bookings and has materially and adversely affected the Company's revenues to date.

Management is unable to predict the extent of the impact the pandemic will have on the Company's financial position and operating results for the remainder of 2022 due to numerous uncertainties, but the impact could be material during any future period affected either directly or indirectly by this pandemic. The Company intends to continue to evaluate the various government-sponsored plans and programs put in place in response to the COVID-19 pandemic and further plans to take advantage of any such government benefits reasonably available to it. Moreover, the Company will continue to monitor developments in that area as new government initiatives are passed.

The COVID-19 pandemic has adversely impacted worldwide supply chains and the ability to obtain sufficient amounts of raw materials and component parts such as nickel and integrated circuits. Further, geopolitical developments across Europe and Asia have and may continue to restrict our ability to procure raw materials and components, as well as impact our ability to sell our products into China, Russia and other Eastern European and Asian regions. In addition, disruptions and delays in the ability of the Company's third-party freight carriers to transport these items to the Company's manufacturing facility also continues to be a challenge. During the third and fourth quarters of 2021, and into 2022, the Company experienced increased costs on certain components as well as delays in supply chain delivery, which has and may continue to impact its ability to recognize revenue and reduce the Company's gross profit margins, as well as extend our manufacturing lead times and reduce its manufacturing efficiencies. We are also seeing the effects of the macroeconomic inflationary cost environment that has resulted in increased costs for labor and materials. The Company is now placing orders with more lead time to help mitigate the manufacturing delays, as well as assessing other suppliers or components to attempt to mitigate the potential cost impacts. In addition, the Company is utilizing its in-house flexible manufacturing to attempt to further mitigate both potential schedule delivery delays and material cost increase. While management has initiated actions to mitigate the potential negative impacts to our revenue and profitability, there can be no assurance of the ultimate impact and the length of time period that the supply chain factors may impact its revenues and profitability.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Except for historical information contained herein, this "Management's Discussion and Analysis of Financial Condition and Results of Operations" contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, as amended. These statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance, or achievements of the Company to be materially different from any future results, performance, or achievements expressed or implied by such forward-looking statements. These forward-looking statements were based on various factors and were derived utilizing numerous important assumptions and other important factors that could cause actual results to differ materially from those in the forward-looking statements. Important assumptions and other factors that could cause actual results to differ materially from those in the forward-looking statements, include but are not limited to: competition in the Company's existing and potential future product lines of business; the Company's ability to attract and retain key personnel and employees; the Company's ability to obtain financing on acceptable terms if and when needed; uncertainty as to the Company's future profitability, uncertainty as to the future profitability of acquired businesses or product lines, uncertainty as to any future expansion of the Company, uncertainty as to the Company's ability to adequately obtain raw materials and components from foreign markets in light of geopolitical developments and the effect of the novel coronavirus (COVID-19) on our business and operations (including with respect to supply chain disruptions), and those of our customers, suppliers and other third parties . Other factors and assumptions not identified above were also involved in the derivation of these forward-looking statements and the failure of such assumptions to be realized as well as other factors may also cause actual results to differ materially from those projected. The Company assumes no obligation to update these forward-looking statements to reflect actual results, changes in assumptions or changes in other factors affecting such forward-looking statements. Past results are no guaranty of future performance. You should not place undue reliance on any forward-looking statements, which speak only as of the dates they are made. When used with this Report, the words "believes", "anticipates", "expects", "estimates", "plans", "intends", "will" and similar expressions are intended to identify forward-looking statements.

Known Trends and Uncertainties

We have been actively monitoring the coronavirus ("COVID-19") outbreak and its impact globally. Our primary focus to this point has been to ensure the health and safety of our employees. To that end, we have adopted social distancing practices where appropriate, implemented travel restrictions, and have taken actions to ensure that our facilities are cleaned and sanitized regularly. These are novel and challenging times and the magnitude of this crisis is requiring us to consider all options to promote the safety of employees, including, where appropriate, or where required to comply with foreign, national, state or local governmental authority recommendations, guidelines, and/or mandates, the temporary reduction or suspension of work at certain of our locations and production facilities to protect employees and curb the spread of the coronavirus. All of these factors have adversely impacted our operating results. In particular, the aerospace sector, for which we rely on for a significant part of our business, has been faced with significant reductions to its business due to reduced long distance air travel which has negatively affected new order bookings and has materially and adversely affected the Company's revenues to date. Significant geopolitical developments across Europe and Asia (including the war in Ukraine) have and may continue to restrict our ability to procure raw materials and components such as nickel and integrated circuits, as well as impact our ability to sell our products into China, Russia and other Eastern European and Asian regions. We continue to be unable to predict the extent of the impact the pandemic will have on our financial position and operating results for the remainder of 2022 due to numerous uncertainties (including the impact of the COVID Omicron variant), supply chain disruptions, rising costs and the impact on the aerospace sector, but the impact could be material during any future period affected either directly or indirectly by this pandemic. The longer-term impacts from the pandemic are highly uncertain and cannot be predicted.

Executive Level Summary

CVD has continued to serve the advanced materials markets with chemical vapor and thermal process equipment for over 38 years. Our products are used in research and development centers as well as in production environments. We develop, design, manufacture and service a broad range of chemical vapor deposition, gas control and other state-of-the-art process equipment and solutions used in advanced materials and coatings. We serve markets ranging from academic/research initiatives to industrial applications. With the adoption of our technology in these markets we see increased usage of our systems across production environments. Major target markets for our business include advanced nanomaterials, batteries and silicon carbide for high power electronics; aerospace gas turbine engines and structural components; medical devices (such as implants); advanced semiconductor devices and silicon for solar cells; and carbon nanotubes and nanowires. Our Application Laboratory supports the development of new material systems and processes. Our CVD Materials group provides material coating services, process development support and process startup assistance. Our Mesoscribe product line continues to support the aerospace and defense markets with robust direct write instrumentation. Our CVD Tantaline subsidiary which underwent a restructuring and consolidation in 2021 provides chemical-resistant coating services to many industrial applications.

We use our capabilities in process development, engineering and vertical manufacturing to transform new applications into mainstream manufacturing solutions. We have built a significant library of design expertise, know-how and innovative solutions to assist our customers in developing these intricate processes and to accelerate their production and commercialization. This library of equipment design solutions, along with our manufacturing and systems integration facilities, allows us to provide application-specific design, process and manufacturing solutions to our customers.

To expand our presence into various growth markets, we are developing a line of proprietary standard use products to complement our customized legacy systems. Historically, we manufactured products for research and development on an application-specific basis to meet an individual customer's specific research and production requirements. Our proprietary systems leverage the technological expertise that we have developed through designing these custom systems into a broader standardized product line. The standard product line is easily configured from a wide range of available options to meet diverse product and budgetary requirements. Manufacturing these standardized systems in higher volumes provides us the flexibility to reduce both the cost and delivery time of our systems. These systems, which we market and sell under the EasyTube® and CVD product lines, are sold to universities, research laboratories, and production companies in the United States and throughout the world.

Sales of our proprietary standard systems, custom systems and process solutions have been driven by our installed customer base, which includes Fortune 500 companies. The performance and success of our products has historically driven repeat orders from existing customers as well as generated business from new customers. Furthermore, with our proprietary solutions and expanded focus on "*accelerating the commercialization of tomorrow's technologies*"™ we have been developing a new customer base in addition to growing with our existing customers. We have generally gained new customers through our industry reputation, as well as limited print advertising and trade show attendance (which has been negatively impacted by COVID-19 in 2020, 2021 and into 2022).

Our core competencies in equipment and software design, manufacturing and process development are used to engineer our finished products and to accelerate the commercialization path of our customer base. Our proprietary real-time software allows for rapid configuration, and provides our customers with enabling tools to understand, optimize and repeatedly control their processes. These factors significantly reduce cost, improve quality and reduce the time it takes between customers' orders and the shipment of our products. Our Application Laboratory allows customers the option to bring up their process tools in our Application Laboratory and to work collaboratively with our scientists and engineers to optimize process performance.

In 2021 and into 2022 our focus has been on our growth markets, the development of standard product solutions and being able to provide solutions from gas/liquid storage through process and process by-product treatment. This has allowed us to provide increased value to our customers.

2022 Developments

In 2021, we launched our strategy to transition the focus of the Company to standardized products serving global growth application markets. Our growth opportunities in 2022 are consistent with our strategic plan to address and serve growth production markets.

In the first half of 2022, total orders were $16.7 million as compared to $9.7 million in the first half of 2021, an increase of $7.0 million or 72.0%. The first half of 2022 orders included 14 system orders for PVT-150 systems that grow silicon carbide ("SiC") material which is subsequently processed into wafers to support high power electronics applications. There have been twenty (20) systems ordered for our PVT-150 systems over the last nine months and all systems are planned to be shipped in 2022.

Statement of Operations

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Revenue	$ 5,808,588	$ 4,034,408	$ 10,460,820	$ 7,400,268
Cost of revenue	4,367,472	3,037,280	8,253,647	5,958,834
Gross profit	1,441,116	997,128	2,207,173	1,441,434
Operating expenses				
Research and development	569,194	430,754	879,401	741,708
Selling and shipping	332,261	229,147	604,940	364,902
General and administrative	1,396,506	1,420,151	2,589,955	3,036,535
Total operating expenses	2,297,961	2,080,052	4,074,296	4,143,145
Operating loss	(856,845)	(1,082,924)	(1,867,123)	(2,701,711)
Other income (expense):				
Interest income	12,647	403	30,929	1,626
Interest expense	-	(107,000)	(5,344)	(214,221)
Gain on debt extinguishment	-	2,443,418	-	2,443,418
Other income	5,621	217,592	5,621	436,827
Total other income, net	18,268	2,554,413	31,206	2,667,650
(Loss) income before income tax	(838,577)	1,471,489	(1,835,917)	(34,061)
Income tax expense	825	1,064	825	1,064
Net (loss) income	$ (839,402)	$ 1,470,425	$ (1,836,742)	$ (35,125)

Three Months Ended June 30, 2022 versus June 30, 2021

Revenue

Our revenue for the three months ended June 30, 2022 was $5.8 million compared to $4.0 million for the three months ended June 30, 2021, an increase of $1.8 million or 44.0%. The increase in revenue for the three months ended June 30, 2022 versus the prior year period was primarily attributable to increased revenue of $2.0 million from the CVD Equipment segment related to equipment sales and spare parts, $.1 million from our SDC segment, offset, in part by, decreased revenue of $.3 million from the CVD Materials segment. Despite achieving an increase in sales of $1.8 million or 44.0% this quarter as compared to the prior year quarter, overall sales levels continue to be negatively impacted by the effects of the COVID-19 pandemic including delays in our supply chain delivery of components which impacts our ability to recognize revenue more timely. For the first and second quarter of 2022 revenue was $4.7 million and $5.8 million, respectively. As a result of the receipt of $12.6 million in new orders during the three months ended June 30, 2022, reduced by our revenue of $5.8 million in the same period, our order backlog at June 30, 2022 was $16.7 million as compared to $9.9 million at March 31, 2022, and $10.4 million at December 31, 2021. Historically, aerospace sales had represented as much as 60% of our total revenue, however, during the three months ended June 30, 2022 and 2021 it represented approximately 9.1% and 19.2%, respectively. This is due to the on-going negative effect the COVID-19 pandemic has had on the aerospace sector, which resulted in reduced long distance air travel and the resultant reduction of industry aircraft engine sales.

The revenue contributed by the CVD Equipment segment for the three months ended June 30, 2022 was $3.8 million, which totaled 65.2% of our overall revenue, and was 110.2% or $2.0 million higher than the segment's $1.8 million contribution made in the three months ended June 30, 2021, which totaled 44.7% of our overall revenue. This revenue increase is the result of $2.3 million of increased equipment sales, the result of the Company's increased new equipment orders in prior quarters, offset, in part by, a reduction of $.3 million in spare parts sales. While we achieved an increase in revenue during the period, the segment continues to be negatively impacted by the slowdown in aerospace demand due to COVID-19.

Revenue for our SDC segment was $1.2 million for the three months ended June 30, 2022 as compared to $1.1 million for the three months ended June 30, 2021, an increase of $.1 million compared to 2021.

Revenues for our CVD Materials segment were $.8 million for the three months ended June 30, 2022, as compared to $1.1 million in the three months ended June 30, 2021. The decrease of $.3 million was the result of reduced revenue in the amount of $.4 million related to our Tantaline products, offset, in part by, increased Mesoscribe revenue of $.1 million.

Gross Profit

Gross profit for the three months ended June 30, 2022 was $1.4 million, with a gross profit margin of 24.8%, as compared to a gross profit of $1.0 million and a gross profit margin of 24.7% for the three months ended June 30, 2021. The increase in gross profit and gross profit margin was primarily the result of leveraging fixed costs on higher sales levels and product mix, which offset certain component cost increases and compensation costs. During the quarter ended September 30, 2021, we started to experience increased costs on certain components as well as delays in supply chain delivery, which also impacts revenue as well as manufacturing lead times and efficiencies. We are also seeing the effects of the macroeconomic inflationary cost environment that has resulted in increased costs for labor and materials. We have been placing orders with more lead time to help mitigate the manufacturing delays, as well as assessing other suppliers or components to attempt to mitigate the potential cost impacts. In addition, we are utilizing our in-house flexible manufacturing to attempt to further mitigate both potential schedule delivery delays and material cost increases. In late 2021, we initiated price increases on new quotations which we anticipate will mitigate our cost increases and we anticipate will benefit margins during 2022.

Research and Development

For the three months ended June 30 2022, research and development expenses were $569,194, or 9.8% of revenue as compared to $430,754, or 10.7% for the three months ended June 30, 2021. The increase in 2022 was the result of increased employee-related costs.

General engineering support and expenses related to the development of more standard products and value-added development of existing products are reflected as part of research and development expense. General engineering support and expenses are charged to costs of goods sold when work is performed directly on a customer order.

Selling

Selling expenses were $332,261 or 5.7% of the revenue for the three months ended June 30, 2022 as compared to $229,147 or 5.7% of the revenue for the three months ended June 30, 2021. The increase in 2022 was primarily the result of increased personnel and employee related costs during the three months ended June 30, 2022, to support increased marketing efforts, as compared to June 30, 2021.

General and Administrative

General and administrative expenses for the three months ended June 30, 2022 were $1,396,506 or 24.0% of revenue as compared to $1,420,151 or 35.2% of revenue for the three months ended June 30, 2021, a decrease of $23,645 or 1.7% of revenue. The decrease in expenses is primarily due to costs in the three months ended June 30, 2021 to vacate the 555 Building and prepare the 355 Building for the consolidation of operations in the amount of $232,000, compared to none in 2022. In addition, costs decreased due to lower building operating costs as a result of the sale of the 555 Building in July 2021, and consolidation of our facilities into our 355 Building. Further, legal expenses decreased by $60,000 primarily due to higher costs in the three months ended June 30, 2021 related to governance, employee related matters and intellectual property. These savings were primarily offset by $105,000 of bad debt recovery in 2021, as compared to none in 2022, a $108,000 increase in foreign exchange loss primarily due to an intercompany loan, and net increased compensation, personnel and benefit costs during the three months ended June 30, 2022, as compared to the prior year quarter.

Operating Loss

As a result of increased sales of $1.8 million and the increased gross profit margins of $.4 million, and increased operating expenses of $.2 million, our operating loss was $.9 million in the three months ended June 30 2022 compared with an operating loss of $1.1 million in the three months ended June 30, 2021.

Other Income

Other income was $18,268 and $2.6 million for the three months ended June 30, 2022 and 2021, respectively. The gain on debt extinguishment for the three months ended June 30, 2021 was the result of forgiveness of the Company's Paycheck Protection Program (the "PPP") loan in the amount of $2.4 million. There was no such gain in the three months ended June 30, 2022. Other income from subleasing a portion of our then 555 Building (which was sold on July 26, 2021) was $217,592 for the three months ended June 30, 2021 as compared to none in the three months ended June 30, 2022. As a result of our increased cash position from the sale of the 555 Building in July 2021, interest income increased $12,244, to $12,647 for the three months ended June 30, 2022 as compared to $403 in 2021. In addition, interest expense related to the Company's mortgages decreased $107,000 to $0 in the three months ended June 30, 2022, as the result of our 555 Building mortgage being satisfied on July 26, 2021 and the remaining mortgage on the 355 Building being satisfied on March 1, 2022. During the three months ended June 30, 2022, we recognized $5,621 in other income primarily from grants, net of the related expenses incurred.

Income Taxes

Income tax expense for the three months ended June 30, 2022 and 2021, was $825 and $1,064, respectively, related to minimum state taxes. We continue to evaluate for potential utilization of our deferred tax asset, which has been fully reserved for, on a quarterly basis, by reviewing our economic models, including projections and timing of orders, cost containment measures and other factors.

Net (Loss) Income

As a result of the foregoing factors, we reported a net loss of $839,402 or $0.12 per basic and diluted share, for the three months ended June 30, 2022, as compared to net income of $1,470,425 (which includes a $2.4 million gain on debt extinguishment), or $0.22 per basic and diluted share for the three months ended June 30, 2021.

Six Months Ended June 30, 2022 versus. June 30, 2021

Revenue

Our revenue for the six months ended June 30, 2022 was $10.5 million compared to $7.4 million for the six months ended June 30, 2021, an increase of $3.1 million or 41.4%. The increase in revenue for the six months ended June 30, 2022 versus the prior year period was primarily attributable to increased revenue of $2.8 million from the CVD Equipment segment related to equipment sales and spare parts, a $.7 million increase in revenue from our SDC segment, offset, in part by, decreased revenue of $.4 million from the CVD Materials segment. Despite achieving a sales increase of $3.1 million or 41.4% during the six months ended June 30, 2022, as compared to the prior year period, overall sales levels continue to be negatively affected by the impacts of the COVID-19 pandemic. These impacts, including delays in our supply chain delivery of components, impacts our ability to recognize revenue more timely. Revenue for the three months ended March 31, 2022 and three months ended June 30, 2022 were $4.7 million and $5.8 million, respectively. Our order backlog at June 30, 2022 was approximately $16.7 million, an increase of $6.3 million as compared to December 31, 2021 of $10.4 million. This increase is due to the receipt of new orders in the first six months of 2022 of $16.7 million, reduced by revenue recognized of $10.5 million during the same period. Historically, aerospace sales had represented as much as 60% of our total revenue, however, during the six months ended June 30, 2022 and 2021 it represented approximately 11.7% and 20.1%, respectively. This is due to the on-going negative effects the COVID-19 pandemic has had on the aerospace sector, which resulted in reduced long distance travel and the resultant reduction of industry aircraft engine sales.

The revenue contributed by the CVD Equipment segment for the six months ended June 30, 2022 was $6.6 million, which totaled 63.2% of our overall revenue, and was 73.7% or $2.8 million higher than the segment's $3.8 million contribution made in the six months ended June 30, 2021, which totaled 51.5% of our overall revenue. This revenue increase is the result of increases of $2.7 million from equipment sales and $.1 million from spare parts sales. While we achieved revenue increases during the period, this segment continued to be impacted by the slowdown in aerospace demand due to the on-going negative effects of the COVID-19 pandemic.

Revenue for our SDC segment was $2.6 million for the six months ended June 30, 2022 as compared to $1.9 million for the six months ended June 30, 2021, an increase of $.7 million resulting from the receipt of one large order in 2022.

Revenues for our CVD Materials segment were $1.3 million for the six months ended June 30, 2022, as compared to $1.7 million in the six months ended June 30, 2021. The decrease of $.4 million was the result of reduced revenue in the amount of $.5 million related to our Tantaline products, offset, in part by, increased Mesoscribe revenue of $.1 million.

Gross Profit

Gross profit for the six months ended June 30, 2022 was $2.2 million, with a gross profit margin of 21.1%, as compared to a gross profit of $1.4 million and a gross profit margin of 19.5% for the six months ended June 30, 2021. The increase in gross profit and gross profit margin was primarily the result of leveraging fixed costs on higher sales levels and higher margin product mix, which more than offset certain component cost increases and compensation costs. During the quarter ended September 30, 2021, we started to experience increased costs on certain components as well as delays in supply chain delivery, which also impacts revenue as well as manufacturing lead times and efficiencies. We are also seeing the effects of the macroeconomic inflationary cost environment that has resulted in increased costs for labor and materials. We have been placing orders with more lead time to help mitigate the manufacturing delays, as well as assessing other suppliers or components to attempt to mitigate the potential cost impacts. In addition, we are utilizing our in-house flexible manufacturing to attempt to further mitigate both potential schedule delivery delays and material cost increases. In late 2021, we initiated price increases on new quotations which we anticipate will mitigate our cost increases and we anticipate will benefit margins during 2022.

Research and Development

For the six months ended June 30, 2022, research and development expenses were $879,401, or 8.4% of revenue as compared to $741,708, or 10.0% for the six months ended June 30, 2021. The increase in 2022 was the result of increased employee-related costs.

General engineering support and expenses related to the development of more standard products and value-added development of existing products are reflected as part of research and development expense. General engineering support and expenses are charged to costs of goods sold when work is performed directly on a customer order.

Selling

Selling expenses were $604,940 or 5.8% of revenue for the six months ended June 30, 2022 as compared to $364,902 or 4.9% of revenue for the six months ended June 30, 2021. The increase in 2022 was primarily the result of increased personnel and employee related costs during the six months ended June 30, 2022, to support increased marketing efforts, as compared to June 30, 2021.

General and Administrative

General and administrative expenses for the six months ended June 30, 2022 were $2,589,955 or 24.8% of revenue as compared to $3,036,535 or 41.0% of revenue for the six months ended June 30, 2021, a decrease of $448,105 or 14.8%. The decrease in expenses is primarily due to costs in the six months ended June 30, 2021 to vacate the 555 Building and prepare the 355 Building for the consolidation of operations in the amount of $232,000, as compared to none in 2022. In addition, other costs decreased due to lower building operating costs as a result of the sale of the 555 Building in July 2021, and consolidation of our facilities into our 355 Building. Further, legal expenses decreased by $266,000 primarily due to higher costs in the six months ended June 30, 2021, of which $100,000 was related to the preparation of the sale of the 555 Building, and the balance was related to general corporate governance, employee related matters and intellectual property. These savings were partially offset by $105,000 of bad debt recovery in 2021, as compared to none in 2022, a $142,000 increase in foreign exchange loss primarily due to an intercompany loan, and net increased compensation, personnel and benefit costs during the six months ended June 30, 2022, as compared to the six month period ended June 30, 2021.

Operating Loss

As a result of increased sales of $3.1 million and the increased gross profit margins of $.8 million, and reduced operating expenses of $.1 million, our operating loss was $1.9 million in the six months ended June 30 2022 compared with an operating loss of $2.7 million in the six months ended June 30, 2021.

Other Income

Other income was $31,206 and $2.7 million for the six months ended June 30, 2022 and 2021, respectively. The gain on debt extinguishment for the six months ended June 30, 2021 was the result of forgiveness of the Company's PPP loan in the amount of $2.4 million. There was no such gain in the three months ended June 30, 2022. Other income from subleasing a portion of our then 555 Building (which was sold on July 26, 2021) was $436,827 for the six months ended June 30, 2021 as compared to none in the six months ended June 30, 2022. As a result of our increased cash position from the sale of the 555 Building in July 2021, interest income increased to $30,929 for the six months ended June 30, 2022 as compared to $1,626 in 2021. In addition, interest expense related to the Company's mortgages was $5,344 and $214,221 in the six months ended June 30, 2022 and 2021, respectively, as the result of our 555 Building mortgage being satisfied on July 26, 2021, and the remaining mortgage on the 355 Building being satisfied on March 1, 2022. During the six months ended June 30, 2022, we recognized $5,621 in other income primarily from grants, net of the related expenses incurred.

Income Taxes

Income tax expense for the six months ended June 30, 2022 and 2021, was $825 and $1,064, respectively, related to minimum state taxes. We continue to evaluate for potential utilization of our deferred tax asset, which has been fully reserved for, on a quarterly basis, by reviewing our economic models, including projections and timing of orders, cost containment measures and other factors.

Net loss

As a result of the foregoing factors, we reported a net loss of $1,836,742 or $0.27 per basic and diluted share, for the six months ended June 30, 2022, as compared to a net loss of $35,125 (which includes a $2.4 million gain on debt extinguishment), or $0.01 per basic and diluted share for the six months ended June 30, 2021.

Liquidity and Capital Resources

As of June 30, 2022, we had aggregate working capital of $15.0 million compared to aggregate working capital of $16.7 million at December 31, 2021. Our cash and cash equivalents at June 30, 2022 and December 31, 2021 were $12.2 million and $16.7 million, respectively.

Net cash used in operating activities was $2.2 million. This is primarily the result of our net loss, adjusted for non-cash items, of $1.3 million, and increases in accounts receivable, contract assets and contract liabilities due to our increase in revenue, as well as increased inventory to support increased orders and our efforts to mitigate further supply chain impacts.

Capital expenditures were $.5 million in the six months ended June 30, 2022 related to purchases of manufacturing equipment to allow for more efficient manufacturing and improved control of our supply chain.

We had a loan agreement with HSBC USA, N.A. (the "HSBC") which was secured by a mortgage on our Central Islip headquarters at 355 South Technology Drive. The loan was payable in 120 consecutive equal monthly installments of $25,000 in principal plus interest and a final balloon payment upon maturity on March 1, 2022. According to the terms of the agreement the loan was satisfied on March 1 2022 resulting in total debt repayments of $1.8 million during the six months ended June 30, 2022.

The COVID-19 pandemic has resulted in extended shutdowns of certain businesses in the United States and around the world. We have been actively monitoring the COVID-19 pandemic and its impact globally. Our primary focus to this point has been to ensure the health and safety of our employees. To that end, we have adopted social distancing where appropriate, implemented travel restrictions, and we have taken actions to ensure that locations and facilities are cleaned and sanitized regularly. These are novel and challenging times and the magnitude of this crisis is requiring us to consider all options to promote the safety of employees, including, where appropriate, or where required to comply with foreign, national, state or local governmental authority recommendations, guidelines, and/or mandates, the temporary reduction or suspension of work at certain of the Company's locations and production facilities to protect employees and curb the spread of the coronavirus. All of these actions have adversely impacted our operating results. In particular, our aerospace sector, for which we rely on a significant part of our business, has been faced with significant reductions to its business due to reduced long distance air travel which has negatively affected new order bookings and has materially and adversely affected the Company's revenues to date. We continue to be unable to predict the extent of the impact the pandemic will have on our financial position and operating results for the remainder of 2022 due to numerous uncertainties (including the impact of the COVID Omicron variant), supply chain disruptions, rising costs and the impact on the aerospace sector, but the impact could be material during any future period affected either directly or indirectly by this pandemic. The longer-term impacts from the pandemic are highly uncertain and cannot be predicted. Our return to profitability is dependent upon, among other things, the receipt of new equipment orders, the lessening of the ongoing effects of COVID-19 on our business and the aerospace market, improvement in the operations of the materials business, as well as managing planned capital expenditures and operating expenses.

Based upon all of these factors, we believe that our cash and cash equivalent positions and our projected cash flow from operations will be sufficient to meet our working capital and capital expenditure requirements for the next twelve to eighteen months of the filing of this Form 10-Q. Should the current environment continue longer or worsen, we will continue to assess our operations and take actions anticipated to maintain our operating cash to support the working capital needs.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain a system of disclosure controls and procedures (as defined in Rule 13a-15(e) and 13d-15(e) under the Exchange Act of 1934, as amended, (the "Exchange Act")). As required by Rule 13a-15(b) under the Exchange Act, our management, under the direction of our Chief Executive Officer and Chief Financial Officer, reviewed and performed an evaluation of the effectiveness of design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of the end of the period covered by this Quarterly Report on Form 10-Q (the "Report").

Based on that review and evaluation, our Chief Executive Officer and Chief Financial Officer, along with others in our management, have determined that as of the end of the period covered by this Report on Form 10-Q the disclosure controls and procedures were effective to provide reasonable assurance that such information is accumulated and communicated to our management, including our principal executive and financial officers, as appropriate to allow timely decisions regarding disclosures.

Changes in Internal Controls

There were no changes in our internal controls over financial reporting as defined in Rule 13a-15(f) or Rule 15d-15(f) under the Exchange Act that occurred during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, the internal controls over financial reporting.

Limitations on the Effectiveness of Controls

We believe that a control system, no matter how well designed and operated, cannot provide absolute assurance that the objectives of the control systems are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.

CVD EQUIPMENT CORPORATION

PART II

OTHER INFORMATION

Item 1. Legal Proceedings.

None.

Item 1A. Risk Factors.

There have been no other material changes to the risk factors disclosed in our Annual Report on Form 10-K as filed with the Securities and Exchange Commission on March 31, 2022.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. **Other Information.**

None.

Item6. **Exhibits**

31.1*	Certification of Emmanuel Lakios, Chief Executive Officer, dated August 15, 2022
31.2*	Certification of Thomas McNeill, Chief Financial Officer, dated August 15, 2022
32.1*	Certification of Emmanuel Lakios, Chief Executive Officer, dated August 15, 2022, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Certification of Thomas McNeill, Chief Financial Officer, dated August 15, 2022, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.1**	Inline XBRL Instance.
101.SCH**	Inline XBRL Taxonomy Extension Schema.
101.CAL**	Inline XBRL Taxonomy Extension Calculation.
101.DEF**	Inline XBRL Taxonomy Extension Definition.
101.LAB**	Inline XBRL Taxonomy Extension Labels.
101.PRE**	Inline XBRL Taxonomy Extension Presentation.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

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* Filed herewith.

** Pursuant to Rule 406T of Regulation S-T, these interactive data files are deemed not to be filed or part of a registration statement of prospectus for purposes of Section 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under these sections.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, this 15th day of August 2022.

CVD EQUIPMENT CORPORATION

By: /s/ Emmanuel Lakios
Emmanuel Lakios
President and Chief Executive Officer
(Principal Executive Officer)

By: /s/ Thomas McNeill
Thomas McNeill
Executive Vice President and
Chief Financial Officer
(Principal Financial and
Accounting Officer)

Exhibit 31.1

Certifications of Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Emmanuel Lakios, certify that:

1. I have reviewed this quarterly report on Form 10-Q of CVD Equipment Corporation;

2. Based upon my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based upon my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal controls over financial reporting, or caused such internal controls over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrants' board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: August 15, 2022

/s/ Emmanuel Lakios
President and Chief Executive Officer

Exhibit 31.2

Certifications of Principal Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Thomas McNeill, certify that:

1. I have reviewed this quarterly report on Form 10-Q of CVD Equipment Corporation;

2. Based upon my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based upon my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal controls over financial reporting, or caused such internal controls over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrants' board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

Dated: August 15, 2022

/s/ Thomas McNeill

Thomas McNeill
Executive Vice President and
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

Certification of Principal Executive Officer
Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

I, Emmanuel Lakios, President and Chief Executive Officer of CVD Equipment Corporation, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge, the quarterly report on Form 10-Q for the period ending June 30, 2022 of CVD Equipment Corporation (the "Form 10-Q") fully complies with the requirements of Section 13 (a) or 15 (d) of the Securities Exchange Act of 1934 and the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of CVD Equipment Corporation.

Dated: August 15, 2022

/s/ Emmanuel Lakios
Emmanuel Lakios
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

Certification of Principal Financial Officer
Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

I, Thomas McNeill, Chief Financial Officer of CVD Equipment Corporation, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge, the quarterly report on Form 10-Q for the period ending June 30, 2022 of CVD Equipment Corporation (the "Form 10-Q") fully complies with the requirements of Section 13 (a) or 15 (d) of the Securities Exchange Act of 1934 and the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of CVD Equipment Corporation.

Dated: August 15, 2022

/s/ Thomas McNeill
Thomas McNeill
Executive Vice President and
Chief Financial Officer
(Principal Financial Officer)