Issuer Free Writing Prospectus dated September 14, 2020
Filed Pursuant to Rule 433 under the Securities Act of 1933
Relating to the Preliminary Prospectus dated September 9, 2020
Registration Statement 333-239705

ASTROTECH
CORPORATION

Astrotech designs and builds business enterprises around extraordinary technologies.

Investor Presentation

September 2020

Nasdaq: ASTC

www.astrotechcorp.com

FORWARD LOOKING STATEMENTS

This presentation contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933. All statements other than statements of historical fact are "forward-looking statements" for purposes of federal and state securities laws. Forward-looking statements may include the words "may," "will," "plans," "believes," "estimates," "expects," "intends" and other similar expressions. Such statements are subject to risks and uncertainties that could cause our actual results to differ materially from those projected in the statements. Such risks and uncertainties include, but are not limited to, the impact of the COVID-19 outbreak on the global economy, including the possibility of a global recession, and more specifically the impact to our business, suppliers, consumers, customers, and employees, our ability to raise sufficient capital to meet our long and short-term liquidity requirements, our ability to continue as a going concern, the effect of economic and political conditions in the United States or other nations that could impact our ability to sell our products and services or gain customers, our ability to successfully pursue our business plan and execute our strategy, the effect of economic and political conditions in the United States or other nations that could impact our ability to sell our products and services or gain customers, product demand and market acceptance risks, including our ability to develop and sell products and services to be used by governmental or commercial customers, the impact of trade barriers imposed by the U.S. government, such as import/export duties and restrictions, tariffs and quotas, and potential corresponding actions by other countries in which the Company conducts its business, technological difficulties and potential legal claims arising from any technological difficulties, supply chain delays and challenges, our ability to meet technological development milestones and overcome development challenges as well as other risks described in the "Risk Factors" of our most recent annual report on Form 10-K for the fiscal year ended June 30, 2020 and in other filings that we periodically make with the SEC.

These forward-looking statements are based on management's current expectations. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. Given these uncertainties, you should not rely on these forward-looking statements as predictions of future events.

Although we believe that the assumptions underlying our forward-looking statements are reasonable, any of the assumptions could be inaccurate. Therefore, we cannot assure you that the forward-looking statements included in this presentation will prove to be accurate. In light of the significant uncertainties inherent in our forward-looking statements, the inclusion of such information should not be regarded as a representation by us or any other person that our objectives and plans will be achieved. Some of these and other risks and uncertainties that could cause actual results to differ materially from such forward-looking statements are more fully described elsewhere in this presentation or our filings made with the SEC. Except as may be required by applicable law, we undertake no obligation to publicly update or advise of any change in any forward-looking statement, whether as a result of new information, future events, or otherwise. In making these statements, we disclaim any obligation to address or update each factor in future filings with the SEC or communications regarding our business or results, and we do not undertake to address how any of these factors may have caused changes to discussions or information contained in previous filings or communications.

We have filed a registration statement, including a preliminary prospectus, with the SEC for the offering to which this communication relates. Before you invest, you should read the preliminary prospectus contained in that registration statement, and the other documents we have filed with the SEC, for more complete information about us and the offering. You may access this preliminary prospectus, dated September 9, 2020, which is included in Amendment No. 1 to the Company's Registration Statement on Form S-1, as filed with the SEC on September 9, 2020, by visiting the SEC's website at: https://www.sec.gov/Archives/edgar/data/1001907/000156459020042961/astc-s1a.htm

ASTROTECH
CORPORATION

ASTROTECH
TECHNOLOGIES INCORPORATED

1st Detect

www.1stdetect.com

AgLAB

www.aglab.com

BreathTech
CORPORATION

www.breathtech.com

ASTROTECH
TECHNOLOGIES INCORPORATED

ASTROTECH
CORPORATION

- Wholly-owned subsidiary of Astrotech Corporation (NASDAQ: ASTC)
- Owner and licensor of breakthrough mass spectrometry technology
- Technology originally developed for NASA to monitor air quality on the International Space Station (ISS)
- R&D grants from:
  - Department of Defense
  - Department of Homeland Security
  - Defense Threat Reduction Agency
- 37 patents, 3 pending

ASTROTECH
TECHNOLOGIES INCORPORATED

1st Detect

ASTROTECH CORPORATION

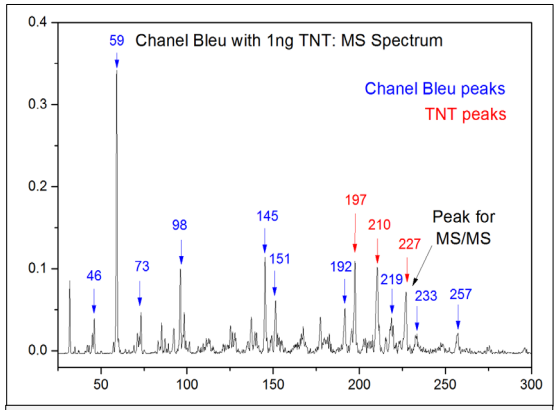
- Wholly-owned subsidiary of Astrotech Corporation
- Exclusive licensee of Astrotech Technologies Inc. for the security & detection market
- Developed the TRACER 1000™, the world's first mass spectrometry-based explosives and narcotics trace detector (ETD) for the U.S. and European governments
- Headquarters, R&D, and manufacturing in Austin, Texas
- Only European Civil Aviation Conference (ECAC) certified mass spectrometer
- Significantly outperforms all current ETD competitors
- Successfully completed TSA Innovation Task Force evaluation
- Cost-performance breakthrough
- Annual ETD market is $484 million[1]

[1]Explosives Trace Detection (ETD): Technologies & Global Market – Homeland Security Research Corp.

TRACER 1000™

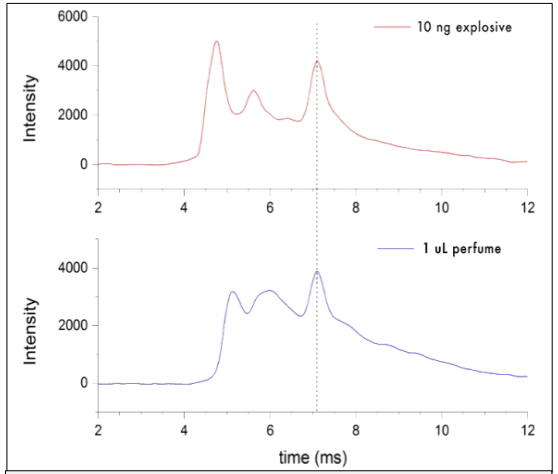
- 1st Detect uses gold standard mass-spec technology that is superior to the currently utilized IMS technology
- 1st Detect mass-spec can detect 100's of threat compounds
  - IMS can only detect 10's of explosive threat compounds
- 1st Detect mass-spec is highly selective with ~100% accuracy
  - IMS has difficulty distinguishing between explosives vs. household products
- 1st Detect is the first, and only certified mass-spec ETD
- Numerous field trials validate value proposition
  - Total samples run: 11,752 over 1104 hours
  - Uptime: 99.72% uptime
  - Clear-down: 15 seconds on average
  - False Alarm Rate: 1.71%[1]

Mass-Spec Spectrum



The TRACER 1000 easily distinguishes between TNT and perfume

IMS Spectrum



Similar peaks of TNT (top) and perfume (bottom) commonly cause false alarms

[1]Newer uncertified algorithms produce <1% false alarms

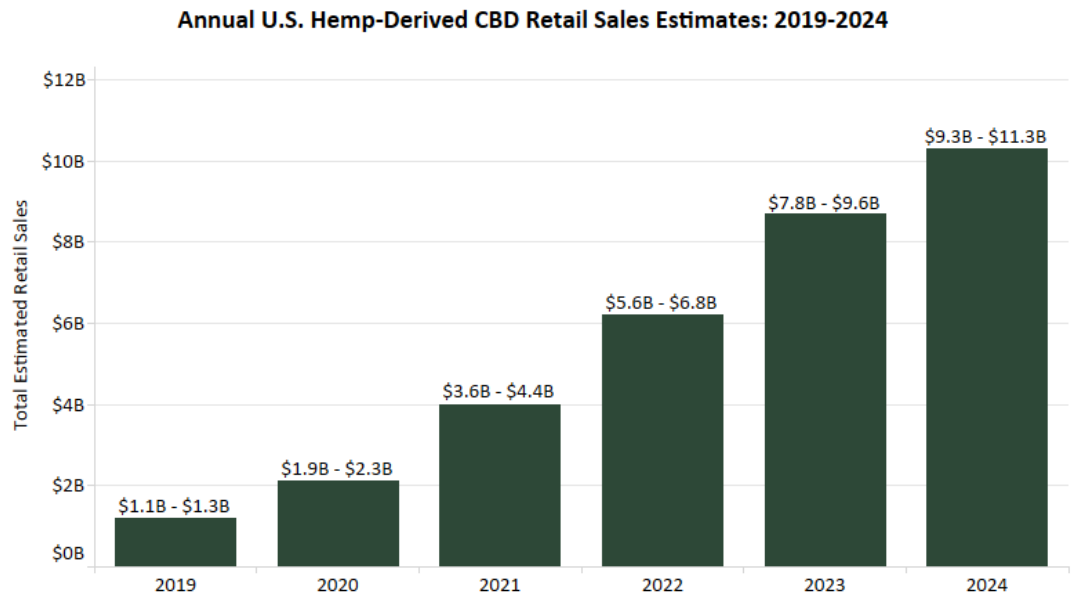
Business Model

- Revenue
  - Sales began - December 2019
    - Long-term contract executed with global shipping company
    - Instruments in 10 locations across 6 European countries
  - Attractive revenue model
    - Up-front purchase
    - Predictable recurring revenue
- Scalable
  - Contract manufactured
  - Annual capacity – thousands of instruments
  - Lowest COGS of any commercial mass-spec

AgLAB

ASTROTECH CORPORATION

- Wholly-owned subsidiary of Astrotech Corporation
- Exclusive licensee of Astrotech Technologies, Inc. for the agriculture market
- Developed the AgLAB-1000™ for use in the agriculture industry for process control and for the detection of trace levels of solvents and pesticides
- Headquarters, R&D and manufacturing in Austin, Texas
- Numerous potential applications in agriculture with initial focus on the hemp and cannabis market
- The global legal hemp and cannabis market size was estimated at $13.8 billion in 2018 and is projected to expand at a CAGR of 23.9% through 2025[1]



Source: 2019 Hemp Business Factbook

[1]Legal Marijuana Market – Grand View Research

AgLAB-1000™

- Maximum Yield Processing – First Mover Advantage
  - The AgLAB-1000-D2™
    - Used in the distillation of hemp & cannabis oils
    - Provides in-process analytics
    - Near real-time reporting of valuable processing yield efficiencies to the operator
    - First simple to use mass-spec for non-scientists
    - Launched September 2020
  - The AgLAB-1000-D1™
    - Used in the distillation of hemp & cannabis oils
    - Provides in-process/in-situ analytics
    - Automatically controls processing efficiency through the PLC
    - Continually adjusts temp, vacuum, flow to maximize yields
    - In development

Business Model

- Sales & marketing plan
  - Direct sales
  - Distillation equipment manufacturers
- Attractive revenue model
  - Hardware as a Service (HaaS) revenue model
  - Monthly recurring license fee
- Leverages manufacturing platform of TRACER 1000
  - ~100% of bill of materials the same
- Competition
  - We believe the AgLAB-1000 is the only solution on the market that can provide crucially needed data during the extraction and distillation process to maximize potency and weight yields

BreathTech CORPORATION

ASTROTECH CORPORATION

- Wholly-owned subsidiary of Astrotech Corporation
- Exclusive licensee of Astrotech Technologies, Inc. for use in breath analysis
- Developing the BreathTest-1000™, designed to be a ~60 second daily breath screening instrument for lung infections, including COVID-19 and pneumonia
- Headquarters, R&D, and manufacturing in Austin, Texas
- Market too new to determine size but expected to be broad
  - Hospitals, nursing homes
  - Schools
  - Military
  - Airports
  - Cruise ships
  - Sporting and performing arts events
  - Building entry

BreathTech CORPORATION

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ASTROTECH CORPORATION

BreathTest-1000™

- Unique breath screening instrument
  - Detecting lung infections including COVID-19 and pneumonia
  - Near real-time – in potentially as little as 60 seconds
  - Non-invasive
  - Self-service kiosk
  - No cross contamination
  - Low-cost per test
- Currently available competition
  - Invasive nasal swab, saliva
  - Often >3 day wait for results
  - Not practical for everyday use
  - Requires trained personnel
  - Expensive

BreathTech CORPORATION

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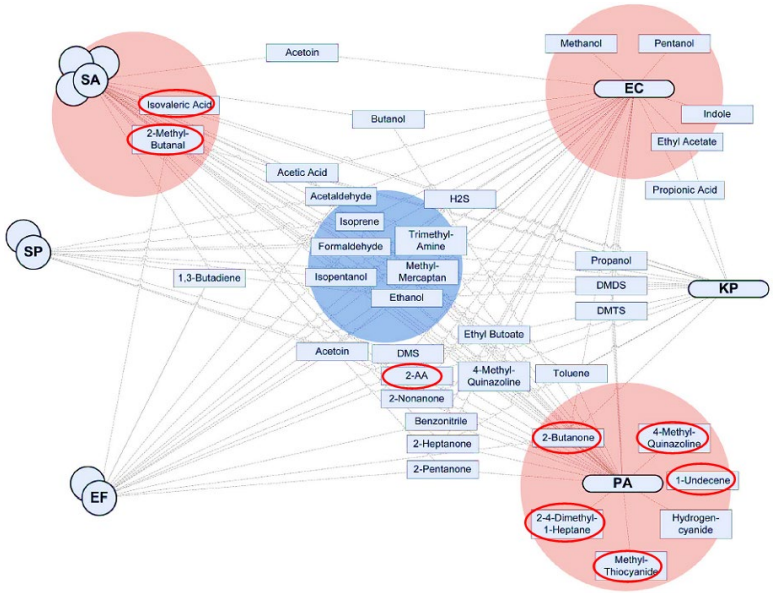
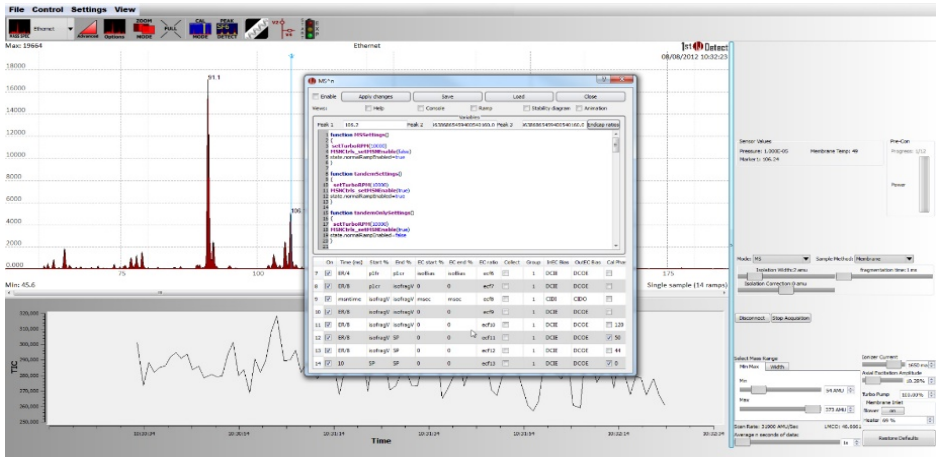
ASTROTECH CORPORATION

Solid Science

- In 2017, partnered with UT Health, San Antonio
  - Conducted pre-clinical trials for the BreathDetect-1000™ prototype to detect VOCs in breath generated by *Pseudomonas aeruginosa* (PA) and *Staphylococcus aureus* (SA)
  - Successfully detected 8 diseased breath VOCs in headspace of cultures
- Evaluated by one of the most renowned breath analysis clinics in the world
  - Determined that the BreathTest-1000 mass spectrometer is capable of detecting infectious breath VOCs pre-clinically





BreathTech CORPORATION

Business Model

- Research & development
  - Leading breath analysis institution now designing pre-clinical trial
    - COVID-19 and related disease library development
    - Assist with obtaining FDA approval
  - Commercialize for scale
    - Manufacturing
    - Distribution
    - Service
- Attractive revenue model
  - Up-front instrument purchase
  - Recurring consumables revenue