INTRADEPARTMENTAL CORRESPONDENCE

August 28, 2019 1.10

TO:

The Honorable Board of Police Commissioners

FROM:

Chief of Police

SUBJECT: APPROVAL OF MONETARY DONATION

RECOMMENDED ACTION

1. That the Board of Police Commissioners APPROVE and ACCEPT the monetary donation in the amount of \$6,545.00 for the Metropolitan Division, Special Weapons and Tactics team.

DONOR INFORMATION:

ITEMS:

Monetary

VALUE:

\$6,645.00

William H. Parker, (#174-19)

Los Angeles Police Foundation Sterling Fields (323) 276-2350

1880 N. Academy Drive

Los Angeles, California 90012

DISCUSSION

The donation is for the benefit of the Metropolitan Division, Special Weapons and Tactics (SWAT) team. Upon approval, the funds will be used to pay for equipment to support the Department's Small Unmanned Aerial System (sUAS) pilot program. The equipment will enable the sUAS to constantly and inutility detect objects and obstacles within a confined space. No expressed or implied commitments or promises were made to the donor or representatives of the donor. The donor will not receive any preferential treatment, endorsement or recommendation and the donor is not allowed the use of any Los Angeles Police Department (Department) patents.

Administrative Services Bureau has reviewed the donation and determined that it has been submitted in accordance with Section 5.467 et seq. of the Los Angeles Administrative Code, which provides for the receipt and acceptance of donations to the Department.

If you have any questions, please contact Lieutenant Chester McMillion, Metropolitan Division, at (213) 352-4700.

Respectfully,

MICHEL R. MOORE

Chief of Police

OFFICIAL CORRESPONDENCE REVIEW FORM

174-19

INITIATED BY: (NAME, BUREAU OR DIVISION, ETC.)

DATE:

CAPT. JONATHAN L. TIPPET

Commanding Officer, Metropolitan Division

July 10, 2019

STAFF OFFICER ASSIGNED: (NAME, BUREAU OR DIVISION, PHONE EXTENSTION, ETC.)

LIEUTENANT RUBEN LOPEZ, SWAT OIC, METROPOLITAN DIVISION

SUBJECT:

REQUEST TO ACCEPT A DONATION - METROPOLITAN DIVISION SWAT TEAM (MAVIC)

Routing Order:	Reviewer Initials:	DIVISION/BUREAU/OFFICE	Routing Order:	Reviewer Initials:	DIVISION /BUREAU/OFFICE
		OFFICE OF OPERATIONS	1	M	METROPOLITAN DIVISION
		OPERATIONS-CENTRAL BUREAU		7	DIVISION
		OPERATIONS-SOUTH BUREAU			DIVISION
_		OPERATIONS-WEST BUREAU	2	47	COMMANDING OFFICER, SPECIAL OPERATIONS GROUP
		OPERATIONS-VALLEY BUREAU	3	MAY	COMMANDING OFFICER, COUNTER-TERRORISM AND SPECIAL OPERATIONS BUREAU
		DIRECTOR, OFFICE OF CONSTITUTIONAL POLICING AND POLICY			DIRECTOR, OFFICE OF SPECIAL OPERATIONS
	(DIRECTOR, OFFICE OF ADMINISTRATIVE SERVICES	5		OFFICE OF THE CHIEF OF POLICE – Administrative Section
4	(B)	COMMANDING OFFICER, ADMINISTRATIVE SERVICES BUREAU			CHIEF OF STAFF
		POST UNIT, TRAINING DIVISION, ROOM 625 PAB	5		CHIEF OF POLICE
		FISCAL OPERATIONS DIVISION (GRANTS SECTION)			COMMANDING OFFICER, COMMUNITY POLICING AND POLICY GROUP
ĺ		MOTOR TRANSPORT DIVISION			

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OCOP #:	OSO #:	CTSOB #:	DIVISION #:
			E)

Counter-Terrorism and Special Operations Bureau

RECEIVED#97

JUL 16 2019

JUL 17 2019

RECEIVED

Special Operations
Group

JUL 15 2019

RECEIVED

ADMINISTRATIVE SERVICES BUREAU

INTRADEPARTMENTAL CORRESPONDENCE

July 10, 2019 16.3

TO: Commanding Officer, Administrative Services Bureau

FROM: Commanding Officer, Metropolitan Division

SUBJECT: REQUEST TO ACCEPT DONATION

It is requested that Administrative Services Bureau (ASB) approve and forward correspondence to the Honorable Board of Police Commissioners to accept a SOLICITED donation from the William H. Parker Los Angeles Police Foundation. This donation, in the amount of \$6,645.00, would facilitate the acquisition of critical equipment for the Department's Special Weapons and Tactics (SWAT) team. The William H. Parker Los Angeles Police Foundation has agreed to purchase the following commercially available items:

- 1 Mavic Enterprise Dual
- 1 Mavic Enterprise Fly More Kit
- 1 Matrice 210 Enhanced Optical Zoom Camera
- 1 Matrice 210 Spare Batteries

The Mavic Enterprise Dual and accessories are all manufactured Da-Jiang Innovations (DJI), which is the approved manufacturer of the Department's Small Unmanned Aerial System (sUAS) pilot program that began in 2018. The Mavic Enterprise Dual is based on the same platform as the currently-approved Spark, but with enhanced technology that was not available when the pilot program began. It is believed that the Mavic Enterprise Dual will outperform the Spark when deployed indoors based on the advanced pilot system, which enables the sUAS to constantly and intuitively detect objects or obstacles within confined spaces. It also has an extended flight time and improved sensors to operate in low to no light conditions. The Mavic Enterprise Dual comes with a standard one-year limited warranty from DJI. There is not maintenance or administrative costs associated with this donation.

DONOR INFORMATION:

William H. Parker Los Angeles Police Foundation 1880 N. Academy Drive Los Angeles CA, 90012 (323) 276-2350 Point of Contact – Sterling Fields Commanding Officer, Administrative Services Bureau Page 2 16.3

All possible conflicts of interest have been thoroughly researched. No expressed or implied commitment or promise was made to the donor or representatives; the donor will not receive any preferential treatment, endorsement, or recommendation. If you have any further questions, please have a member of your staff contact Lieutenant Chester McMillion, Metropolitan Division, at (213) 352-4700.

APPROVED:

JONATHAN L. TIPPET, Captain

Commanding Officer Metropolitan Division HORACE E. FRANK, Deputy Chief

Home Ed

Commanding Officer

Counter-Terrorism and Special Operations Bureau

Const	ımer	Professional	Enterprise	Components	Explore	Suppor	t			Store	
MAVIC 2 ENTERPRISE						SPEC	DOWNLOADS	FAO	VIDEO	ENTERPRISE SHIELD	

Built to Empower. Destined to Serve.



Designed to empower a new generation of workers, the Mavic 2 Enterprise is the ultimate expression of a tool that delivers beyond expectation to meet current workplace challenges and future demands.



Zoom Camera **Dual Camera** OcuSync 2.0 Modular Accessories **Password Protection** DJI.

MAVIC 2 ENTERPRISE SPECS

Home / Products / Mavic 2 Enterprise / Specs

AIRCRAFT

Takeoff Weight(Without Accessories)

Zoom Edition:905 g

Dual Edition:899 g

Max Takeoff Weight

1100 g

Folded: 214×91×84 mm Dimensions(L×W×H) Unfolded: 322×242×84 mm

> Unfolded+Spotlight: 322×242×114 mm Unfolded+Beacon: 322×242×101 mm Unfolded+Speaker: 322×242×140 mm

Diagonal Length 354 mm

Max Ascent Speed 5 m/s (S-mode[1])

4 m/s (P-mode)

4 m/s (S-mode with accessories(1)) 4 m/s (P-mode with accessories)

Max Descent Speed 3 m/s (5-mode(1)) 3 m/s (P-mode)

Max Speed (near sea level, no wind) 72 kph (S-mode, without wind)

50 kph (P-mode, without wind)

Max Service Ceiling Above Sea Level

Max Flight Time (no wind) 31 min (at a consistent speed of 25 kph)

Max Hovering Time (no wind) 29 min

27 min (with beacon turned on) 28 min (with beacon turned off) 22 min (with spotlight turned on)

26 min (with spotlight turned off) 25 mln (with speaker turned on) 26 min (with speaker turned off)

Max Wind Speed Resistance 29-38 kph

Max Tilt Angle 35° (S-mode, with remote controller)

25° (P-mude)

Max Angular Velocity 200°/s (S-Mode)

100°/s (P-Mode) 200°/s (S-Mode)

100°/s (P-Mode)

Operating Temperature Range -10°C to 40°C **GNSS** GPS+GLONASS

Hovering Accuracy Range Vertical:

±0,1 m (with Vision Positioning) ±0.5 m (with GPS Positioning)

Horizontal: ±0,3m (with Vision Positioning)

±1.5 m (with GPS Positioning)

Operating Frequency 2.400 - 2,4835 GHz 5.725 - 5.850 GHz

Transmission Power (EIRP) 2.400 - 2.4835 GHz FCC: ≤26 dBm

CE: ≤20 dBm

M2ED THERMAL CAMERA

Sensor Resolution

Pixel Pitch

Uncooled VOx Microbolometer

Lens HFOV: 57° Aperture; f/1, 1

160×120 12 µm

Spectral Band 8-14 µm Image Size f21 640×480 (4:3);

640×360 (16:9)

Still Photography Modes Single shot

Burst shooting: 3/5/7 frames

Video Recording Modes 640×360 @8.7fps

Accuracy High Gain: Max ±5% (typical) Low Gain: Max ±10% (typical)

High Gain: -10° to +140°C Scene Range

Low Gain: -10°to +400°C

Photo JPEG

Video MP4, MOV (MPEG-4 AVC/H.264)

M2ED VISUAL CAMERA

Sensor 1/2.3" CMOS: Effective pixels: 12M

FOV: approx, 85° Lens

35 mm format equivalent:24 mm

Aperture: f/2.8 Focus; 0,5 m to ∞

ISO Range Video; 100-3200 (auto)

Photo; 100-1600 (auto)

4056×3040 (4:3); 4056×2280 (16:9) Max Image Size

Still Photography Modes Single shot

Burst shooting: 3/5/7 frames

Interval (2/3/5/7/10/15/20/30/60 s)

Video Recording Modes 4K Ultra HD: 3840×2160 30p 2.7K: 2688×151230p

FHD: 1920×108030p

Max Video Bitrate 100 Mbps Photo JPEG

MP4, MOV(MPEG-4AVC/H,264) Video Format

SRRC: ≤20 dBm

MIC: ≤20 dBm5.725-5.850 GHz

FCC: ≤26 dBm CE: ≤14 dBm SRRC: ≤26 dBm

Tilt: -135 - +45°

Tilt: -90 - +30° Pan: -75 - +75°

±0.005

Pan: -100 - +100°

3-axis (tilt, roll, pan)

Internal Storage 24 GB

GIMBAL

Mechanical Range

Controllable Range

Max Control Speed (tilt)

Angular Vibration Range

Stabilization

Sensing System

M2E CAMERA

Still Photography Modes

Sensor 1/2.3° CMOS: Effective pixels:12 Megapixels

FOV: 82.6°(24 mm); 47.8°(48 mm)

Format equivalent : 24-48 mm Aperture: f/2,8(24 mm)-f/3,8(48 mm)

Video:

Auto focus at : 0.5-@

'SO Range

Lens

100-3200 Photo: 100-1600(Auto) 100-3200(Manual)

Shutter Speed 8-1/8000s Still Image Size 4000×3000

Burst shooting: 3/5/7 frames

Auto Exposure Bracketing (AEB); 3/5 bracketed

Single shot

Interval (IPEG: 2/3/5/7/10/15/20/30/60s

SENSING SYSTEM

Omnidirectional Obstacle Sensing [3]

Max Video Bitrate

100 Mbps

Forward Precision Measurement Range: 0.5 - 20 m Color Mode D-Clnelike

Detectable Range: 20 - 40 m Supported File System Effective Sensing Speed: ≤ 14m/s FOV: Horizontal: 40°, Vertical: 70

Backward Precision Measurement Range: 0.5 - 16 m

Detectable Range: 16 - 32 m Effective Sensing Speed; ≤ 12m/s FOV: Horizontal: 60°, Vertical: 77

Upward Precision Measurement Range: 0.1 - 8 m

Precision Measurement Range: 0.5 - 11 m Downward Detectable Range: 11 - 22 m

Sides Precision Measurement Range: 0.5 - 10 m

REMOTE CONTROLLER

Operating Frequency

Max Transmission Distance

Supported USB port types

(Unobstructed, free of Interference)

Effective Sensing Speed: ≤8m/s

FOV: Horizontal: 80°, Vertical: 65°

Operating Environment

Surface with clear pattern and adequate lighting (lux > 15)

Upward:

Detects diffuse reflective surfaces (>20%)

(walls, trees, people, etc.) Downward:

Surface with clear pattern and adequate lighting (lux > 15)

Detects diffuse reflective surfaces (>20%)

2.400 - 2.483 GHz; 5.725 - 5.850 GHz

(walls, trees, people, etc.)

RAW:5/7/10/15/20/30/60s)

Video Resolution 4K; 3840×2160 24/25/30p

2.7K: 2720×1530 24/25/30/48/50/60p FHD: 1920×1080 24/25/30/48/50/60/120p

FAT32(≤ 32 GB); exFAT(> 32 GB)

Photo Format JPEG , DNG (RAW)

MP4/MOV (MPEG-4 AVC/H.264) Video Format

CHARGER

Input 100-240V , 50-60Hz , 1,8A

Output Main: 17.6V - 3.41A or 17.0V - 3.53

USB: 5V = 2A

DII PILOT

17.6±0.1V Voltage

Rated Power 60W

INTELLIGENT FLIGHT BATTERY

Capacity 3850 mAh Voltage 15.4V Max Charging Voltage 17.6 V LiPo Battery Type Energy 59.29 Wh

2.400 - 2.483 GHz; 5.725 - 5.850 GHz Net Weight 297 g FCC: 8000 m Charging Temperature 5℃ - 40℃ CE: 5000 m SRRC: 5000 m Operating Temperature Range -10℃ to 40℃ MiC: 5000 m

Heating Methods Manual Heating; Auto Heating 0°C to 40°C Operating Temperature Range

Heating Temperature -20°C to 6°C Transmitter Power(EIRP) 2.4 - 2.4835 GHz

FCC: ≤26 dBm; CE: ≤20 dBm; SRRC: ≤20 dBm MIC: ≤20 Heating duration: 500s (Max)

5.725 - 5,850 GHz Heating Power 55W (Max) FCC: ≤26 dBm; CE: ≤14 dBm; SRRC: ≤26 dBm

APP / LIVE VIEW

Mobile App

Charging Time 90 min Battery 3950mAh Max Charging Power 80W 2 hours 15 min Charging Time

1800mA = 3.83V Operating Current/Voltage Mobile Device Holder Thickness Supported: 6.5-8.5 mm, Max length; 160 mm

Lightning, Micro USB (Type-B), USB Type-C™

Folded: 145×80×48 mm (L×W×H) Unfolded: 190×115×100 mm (L×W×H) Video Transmission System OcuSync 2.0

https://www.dji.com/mavic-2-enterprise/info

M2E SPOTLIGHT

Dimensions

68x60x41 mm

Port Type

USB Micro-B

Operating Range

30 m

Power

Max 26W

Huminance

FOV17°, Max: 11iux@30m Straight

M2E BEACON

Dimensions
Port Type

68x40x27,8 mm

Power

USB Micro-B Avg. 1.6W 5000 m

Controllable Range

Min Angle: 55 cd;

Light intensity: 157 cd

M2E SPEAKER

Dimensions
Port Type

68x55x65 mm

Power

USB Micro-B

Decibel

100 db @ 1 meter distance

Bitrate

16 kbps

FOOTNOTES

Footnotes

[1] Remote controller required.

[2] Due to real-time digital enhancements, the photo and video size of the thermal data is larger than the sensor's

native resolution.

[3] Omnidirectional Obstacle Sensing includes left/right, up/down, and forward/backward obstacle sensing. Sensing for left/right directions is only available in ActiveTrack or Tripod Mode. Omnidirectional Obstacle Sensing does not fully cover the circumference of a 360-degree arc. And left and right obstacle sensing system only works in specific modes and environments. DJI warranty does not cover any loss caused by crashing when flying left or right, even when ActiveTrack or Tripod mode is activated. Please be aware of your surroundings and App notifications when operating the Mavic 2 to ensure safety. These specs have been determined through tests conducted with the latest firmware. Firmware updates can enhance performance, so updating to the latest firmware is highly recommended."

[4]These specs have been determined through tests conducted with the latest firmware, Firmware updates can enhance performance, so updating to the latest firmware is highly recommended."

Live View Quality

Max Live View Bitrate

Remote Controller: 720p@30fps/1080p@30fps

•

40 Mbps

Latency
Required Operating Systems

120 - 130 ms

los 10.0 or later Android 5.0 or later

SUPPORTED SD CARDS

Supported SD Cards

Micro SD™

Supporting Micro 5D with capacity up to 128 G

speed up to UHS-I Speed Grade 3

MAVIC 2 ENTERPRISE VIDEOS

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