



ORANGE COUNTY FIRE AUTHORITY

AGENDA

EXECUTIVE COMMITTEE REGULAR MEETING

Thursday, February 24, 2022

5:30 P.M.

Regional Fire Operations and Training Center

Board Room

1 Fire Authority Road
Irvine, CA 92602

Michele Steggell, Chair

Anthony Kuo, Vice Chair

Shelley Hasselbrink • Donald P. Wagner • Noel Hatch • Dave Shawver

Gene Hernandez • John O'Neill • Tri Ta

Ex Officio Member - Dennis Wilberg, Mission Viejo

NOTICE REGARDING PUBLIC PARTICIPATION **DURING COVID-19 EMERGENCY**

This meeting is not open to in-person attendance. There are several alternative ways to view and to make comments during the meeting though:

Internet Access to the Meeting:

You may access the meeting live electronically at: <https://player.cloud.wowza.com/hosted/xvtnc1kw/player.html>. (Note: you should use one of the other alternatives below if you want to make comments during the meeting.)

Live Public Comments by Zoom: You may also view and make real-time verbal comments during the meeting via the Zoom link below during the meeting. You will be audible during your comments, but the committee members will not be able to see you. To submit a live comment using Zoom, please be prepared to use the "Raise Your Hand" feature when public comment opportunities are invited by the Chair. (You can raise your hand on your smart phone by pressing *9.) Also, members of the public must unmute themselves when prompted upon being recognized by the Chair in order to be heard. (To unmute your smartphone in Zoom, press *6.)

Zoom Log-In: <https://zoom.us/j/83264128588#success>

Meeting ID: 832 6412 8588

Passcode: 298121

Raise Your Hand (press *9) and Unmute (press *6)

E-Comments: Alternatively, you may email your written comments to coa@ocfa.org. E-comments will be provided to the committee members upon receipt and will be part of the meeting record as long as they are received during or before the committee takes action on an item. Emails related to an item that are received after the item has been acted upon by the committee will not be considered.

Further instructions on how to provide comments is available at: <https://ocfa.org/PublicComments>.



In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, you should contact the Clerk of the Authority at (714) 573-6040 and identify the need and the requested modification or accommodation. Please notify us as soon as is feasible, however 48 hours prior to the meeting is appreciated to enable the Authority to make reasonable arrangements to assure accessibility to the meeting.

This Agenda contains a brief general description of each item to be considered. Except as otherwise provided by law, no action or discussion shall be taken on any item not appearing on the following Agenda. Unless legally privileged, all supporting documents, including staff reports, and any writings or documents provided to a majority of the committee members after the posting of this agenda are available for review at the Orange County Fire Authority Regional Fire Operations & Training Center, 1 Fire Authority Road, Irvine, CA 92602 or you may contact the Clerk of the Authority at (714) 573-6040 Monday through Thursday, and every other Friday from 8 a.m. to 5 p.m. and available online at <http://www.ocfa.org>

CALL TO ORDER by Chair Steggell

INVOCATION by OCFA Chaplain Gerardo Arenado

PLEDGE OF ALLEGIANCE by Director Ta

ROLL CALL by Clerk of the Authority

REPORTS

- A. Report from the Budget and Finance Committee Chair**
- B. Report from the Human Resources Committee Chair**
- C. Quarterly Capital Improvement Update (CIP) Update**

PUBLIC COMMENTS

Please refer to instructions on how to submit a public comment during COVID-19 Emergency on Page 1 of this Agenda.

1. PRESENTATIONS

No items.

2. CONSENT CALENDAR

All matters on the consent calendar are considered routine and are to be approved with one motion unless a Committee Member or a member of the public requests separate action on a specific item.

A. Minutes for the Executive Committee Meeting

Submitted by: Maria D. Huizar, Clerk of the Authority

The record will reflect that any Director not in attendance at the meeting of the Minutes will be registered as an abstention, unless otherwise indicated.

Recommended Actions:

1. Approve the Minutes for the January 27, 2022, Regular Meeting as submitted.
2. Approve the Minutes for the January 27, 2022, Concurrent Joint Special Meeting as submitted.

B. Monthly Investment Reports

Submitted by: Robert Cortez, Assistant Chief/Business Services Department, Tricia Jakubiak, Treasurer/Treasury & Financial Planning and James Slobojan, Assistant Treasurer/Treasury & Financial Planning

On February 9, 2022, the Budget and Finance Committee reviewed the proposed agenda item and directed staff to place the item on the Executive Committee agenda by a vote of 8-0.

Recommended Action:

Receive and file the reports.

C. Second Quarter Financial Newsletter

Submitted by: Robert Cortez, Assistant Chief/Business Services Department, Tricia Jakubiak, Treasurer/Treasury & Financial Planning and Stuart Lam, Budget Manager/Treasury & Financial Planning

On February 9, 2022, the Budget and Finance Committee reviewed the proposed agenda item and directed staff to place the item on the Executive Committee agenda by a vote of 8-0.

Recommended Action:

Receive and file the report.

D. Contract Amendment for Ground Tree Surveys for Invasive Tree Pests

Submitted by: Lori Smith, Assistant Chief/Fire Marshal Community Risk Reduction Department and Jennifer Bower, Deputy Fire Marshal/Wildland Pre-Fire Management

Recommended Action:

Approve and authorize the Purchasing Manager to increase and extend the previously approved agreement with ANR for grant-funded ground tree survey monitoring and additional advisory services in an aggregate amount not to exceed \$702,760.79 (Extended Year One: \$185,528, Extended Year Two: \$205,638 and Extended Year Three: \$213,890 with Amendment 1: \$11,975.79) for the duration of the extended grant period through March 15, 2025.

E. Contract Amendment for Archaeological and Environmental Services

Submitted by: Lori Smith, Assistant Chief/Fire Marshal Community Risk Reduction Department and Jennifer Bower, Deputy Fire Marshal/Wildland Pre-Fire Management

Recommended Action:

Approve and authorize the Purchasing Manager to extend the previously approved grant-funded Professional Services Agreement with The Chambers Group, Inc. for three additional years through March 25, 2025, to allow for archaeological and environmental consulting services for the duration of the extended grant period.

F. Approval of the California Fire and Rescue Training Authority Urban Search & Rescue Mobilization Exercise Agreement

Submitted by: Kenny Dossey, Deputy Chief/Emergency Operations Bureau, Vince Carpino, Division Chief/Operations Department and Steve Dohman, Battalion Chief/US&R Program Manager

Recommended Action:

Approve and authorize the Fire Chief or his designee to execute the proposed agreement.

G. Increase Blanket Order Contract for Apparatus Bay Door Maintenance and Repair Services

Submitted by: Jim Ruane, Assistant Chief/Logistics Department and Patrick Bauer, Construction & Facilities Division Manager/Logistics Department

Recommended Action:

Approve and authorize the Purchasing Manager to increase blanket order contract amount with Mako Overhead Door by \$37,000 to a total not to exceed \$237,000 annually for the contract ended October 31, 2021, and for the final renewal term beginning November 1, 2021.

H. Blanket Order Contract for Motorola 800MHz Radios

Submitted by: Jim Ruane, Assistant Chief/Logistics Department and Joel Brodowski, IT Division Manager/Logistics Department

Recommended Action:

Approve and authorize the Purchasing Manager to issue a renewal Blanket Order contract in an amount not to exceed \$640,000 annually to Motorola Solutions, Inc. to utilize Orange County Contract Equipment and Services Price Book Agreement #MA-060-21010004 through May 20, 2025, provided that funding is available in the approved budget.

I. Increase Blanket Order Contract for Firefighter Turnout Personal Protective Equipment (PPE)

Submitted by: Jim Ruane, Assistant Chief/Logistics Department and Russ Snider, Service Center Supervisor/Logistics Department

Recommended Action:

Approve and authorize the Purchasing Manager to increase the previously approved Blanket Order contract with AllStar by \$380,000 to an annual amount not to exceed \$1,139,000 for

the current renewal term (Contract Year Three) in addition to each of the remaining optional two one-year renewals (Contract Years Four and Five, respectively).

3. DISCUSSION CALENDAR

No items.

COMMITTEE MEMBER COMMENTS

ADJOURNMENT – The next regular meeting of the Orange County Fire Authority Executive Committee is scheduled for Thursday, March 24, 2022, at 5:30 p.m.

AFFIDAVIT OF POSTING

I hereby certify under penalty of perjury and as required by the State of California, Government Code § 54954.2(a), that the foregoing Agenda was posted in the lobby and front gate public display case of the Orange County Fire Authority, Regional Fire Operations and Training Center, 1 Fire Authority Road, Irvine, CA, not less than 72 hours prior to the meeting.

Maria D. Huizar, CMC
Clerk of the Authority

FUTURE EC AGENDA ITEMS – THREE-MONTH OUTLOOK:

- Monthly Investment Report
- 3rd Quarter Financial Newsletter
- New Classification Specification for Lead Hand Crew Superintendent

UPCOMING MEETINGS:

Budget & Finance Committee
Concurrent Joint Special Meeting of the
Board of Directors and all Committees
Executive Committee
Board of Directors

Wednesday, March 9, 2022, 12 noon

Thursday, March 24, 2022, 6:00 p.m.

Thursday, March 24, 2022, 5:30 p.m.

Thursday, March 24, 2022, 6:00 p.m.

ITEM	BUDGET	PROGRESS	ANTICIPATED COMPLETION	COMMENTS
Fire Stations and Facilities (CIP Fund 123)				
1. Fire Station 24 Replacement (Mission Viejo)	\$13M	Planning	TBD	Interviews scheduled for March 2022 with the two design/build teams that submitted responsive proposals. Both designs will be submitted to City of Mission Viejo Plan Check and OCFA Fire Prevention prior to interviews with firms.
2. Fire Station 10 Replacement (Yorba Linda)	\$13.5M	Planning	TBD	Current Station 10 site is available for construction of new station. Meeting with Yorba Linda School District for temporary site locations during construction.
3. RFOTC Training Grounds Upgrade	\$6.9M	Ongoing	TBD	Phase 2 and Phase 3 to be combined pending CEQA and City of Irvine pre application approval - Environmental study in process (Dudek Consulting); 70% complete. In discussions with City of Irvine regarding CUP approval process.
4. Fire Station 12 (Laguna Woods)	\$8.0M	Ongoing	Ongoing	Potential site identified. Working on ground lease options for the property.

ITEM	BUDGET	PROGRESS	ANTICIPATED COMPLETION	COMMENTS
5. Station 49 Apparatus Bay Floor Reconstruction	\$1.03M	Ongoing	22-Mar	Meeting with contractor, plumber and engineers Feb. 22, 2022 to coordinate schedules. All soil has been removed, plumbing and electrical has been repaired.
6. Fire Station 52 (Irvine)	\$8.0M	Ongoing	TBD	Potential sites identified. OCFA staff meeting with UCI and City of Irvine
7. Fire Station 67 (Rancho Mission Viejo)	Developer Funded	Implementing	1-Dec	Final design completed and submitted to County for plan check. Estimated fabrication to begin May 2022, installation July 2022; Staffing Nov./Dec. 2022.
8. Inclusive Facilities	\$9.48M	Ongoing	TBD	FS13 completed early February. FS14, 16 and 42 are out to bid. Contracts awarded for FS53 and FS32. FS8 estimated completion end of Feb. 2022.
9a. RFOTC Security Enhancements	\$1.4M	Implementing	Ongoing	Access control and camera upgrades design and specifications completed. Job walk scheduled for Mar. 9, 2022.
9b. RFOTC Cyber Security upgrade	\$100K	Implementing	Ongoing	Receiving network components for the 911 side of the data network. Equipment installed Jan/Feb 2022. Planning cut-over to new network firewalls Mar. 2022.

ITEM	BUDGET	PROGRESS	ANTICIPATED COMPLETION	COMMENTS
Communications and Information Systems (CIP Fund 124 and 12110)				
10. Disaster Recovery for 9-1-1 Dispatch/IT Co-Location Facility	\$1.1M	Planning	Jun-22	New power/data/network hardware and connections for FS43 installed/tested for Dispatch Trailer. ATT completed VESTA 911 firewall mods. Rough Order Magnitude (ROM) prices received from KITCHELL, summary report developing for Exec. Management in process.
11. Records Management System Integrated Fire Prevention (IFP) replacement approved Nov-2019.	\$1.9M	Implementing	Jun-23	Project 43% completed and proceeding well. Multiple software modules, user interface, GIS integration in process. Demo site has live data. Go-live planned for June 2023.
12. RFOTC Data Center Fire Suppression upgrade	\$1M	Implementing	Dec-21	Project only rec'd one bid which was not accepted. Re-bidding after asking engineering firm to re-evaluate estimated costs for FM200 clean agent which has risen substantially due to supply chain shortages. Anticipate complete re-bid in Mar. 2022.

ITEM	BUDGET	PROGRESS	ANTICIPATED COMPLETION	COMMENTS
Apparatus and Vehicles (CIP Fund 133)				
Prior Year FY 2020/21 Carryforward				
13. Trucks (6)	\$9.3 M	6 of 6	Feb-23	(6) Trucks bids awarded, and units ordered; (3) Rear-Mount trucks (KME) (3) Mid-mount trucks (Supthen). Estimated delivery late 1st Qtr. 2023.
14. Type I Engine (13)	\$9.6 M	13 of 13	Variable	12 of 13 Engines have been delivered. Expected in-service date for first 3 engines late Mar. 2022.
15. HazMat Vehicle	\$2.1 M	2 of 2	Jun-22	Delivery expected in late 2022
16. Heavy Rescue	\$835K	1 of 1	Jun-22	Vehicle construction in progress; estimated completion Jun. 2022
17. Apparatus & Trailers (10)	\$1.1 M	10 of 10	Variable	Units are in the specification review process and preparing to go out to bid
18. Foam Tender #36	\$611 K	1 of 1	Delivered	Delivered
19. Haz Mat Support Vehicle #220	\$1.1 M	1 of 1	Dec-22	Vendor behind in production expected delivery late 2022
20. Service Support Air Utility	\$525K	1 of 1	Delivered	Delivered Jan. 2022. In-service March 2022
21. Paramedic Squad (FS 67)	\$273K	0 of 1	TBD	Specifications under review

FY 2021/22				
ITEM	BUDGET	PROGRESS	ANTICIPATED COMPLETION	COMMENTS
22. Engines - Wildland/Type 3 (2)	\$1.3M	2 of 2	TBD	Received updated pricing from KME Oct. 25/2021. Budget rolled to FY2022/23 for purchase in late 2022.
23. Pick up 1/2 & 3/4 Ton-Emergency/Cadre/ Training/Pool (16)	\$873 K	16 of 16	TBD	No vehicles available. Budget rolled to FY2022/23 for purchase in late 2022.
24. Sedan - Pool (2)	\$84 K	2 of 2	TBD	Bids issued 7/20/21; rebid pending
25. Dozer Transport Trailer (1)	\$170 K	1 of 1	Mar-22	Pending delivery 1st Qtr. 2022.
26. SUVs - Support mid & full 4x4 (13)	\$680 K	13 of 13	TBD	No vehicles available. Budget rolled to FY2022/23 for purchase in late 2022.
27. Step Van - Support (3)	\$162 K	3 of 3	May-22	Currently out to bid.
28. Light Duty Vehicles - Pickup/SUVs - Emergency & Support (30)	\$2.3 M	0 of 30	TBD	No vehicles available. Budget rolled to FY2022/23 for purchase in late 2022.
29. Light Duty Vehicles - Pickup/SUVs - Support (16)	\$883 K	0 of 16	TBD	No vehicles available. Budget rolled to FY 2023 for purchase in 2022.

ITEM	BUDGET	PROGRESS	ANTICIPATED COMPLETION	COMMENTS
30. Dozer/Fuel Tenders (3)	\$800 K	0 of 3	TBD	No vehicles available. Budget rolled to FY 2023 for purchase in 2022.
31. UTVs/Trailers/Misc. - Support (7)	\$130 K	0 of 7	TBD	No vehicles available. Budget rolled to FY2022/23 for purchase in late 2022.

MINUTES ORANGE COUNTY FIRE AUTHORITY

**Executive Committee Regular Meeting
Thursday, January 27, 2022
5:30 P.M.**

**Regional Fire Operations and Training Center
Board Room
1 Fire Authority Road
Irvine, CA 92602**

CALL TO ORDER

Chair Shawver called the regular meeting of the Orange County Fire Authority Executive Committee to order at 5:30 p.m. on January 27, 2022.

INVOCATION

The invocation was led by OCFA Chaplain Kent Kraning.

PLEDGE OF ALLEGIANCE

Director Hernandez led the assembly in the Pledge of Allegiance to our Flag.

ROLL CALL

Present: Dave Shawver, Stanton, Chair
Michele Steggell, La Palma, Vice-Chair
Shelley Hasselbrink, Los Alamitos*
Noel Hatch, Laguna Woods*
Gene Hernandez, Yorba Linda*
John O'Neill, Garden Grove*
Donald P. Wagner, County of Orange*

Absent: Dennis Wilberg, Ex Officio

Also present were:

Fire Chief Brian Fennessy	Deputy Chief Lori Zeller
Deputy Chief Kenny Dossey	Assistant Chief Robert Cortez
Assistant Chief Jim Ruane	Assistant Chief Randy Black
Assistant Chief Lori Smith	Assistant Chief Phil Johnson
Assistant Chief Stephanie Holloman	General Counsel David Kendig
Clerk of the Authority, Maria D. Huizar	

**Those members attending via Teleconferencing*

REPORTS

A. Report from the Budget and Finance Committee Vice Chair (FILE 12.02A6)

This item was deferred to the Board of Directors meeting.

PUBLIC COMMENTS

Chair Shawver opened the Public Comments portion of the meeting. Chair Shawver closed the Public Comments portion of the meeting without any comments from the general public.

1. PRESENTATIONS

None.

2. CONSENT CALENDAR

On motion of Director Hernandez, and second by Director Wagner, and following a roll call vote, declared passed 7-0 Agenda Items 2A-2F.

A. Minutes for the Executive Committee Meeting (FILE 12.02A2)

Action:

1. Approve the Minutes for the November 18, 2021, Regular Meeting as submitted.
2. Approve the Minutes for the November 18, 2021, Concurrent Joint Special Meeting as submitted.
3. Approve the Minutes for the December 16, 2021, Concurrent Joint Special Meeting as submitted.
4. Approve the Minutes for the January 13, 2022, Concurrent Joint Special Meeting as submitted.

B. Monthly Investment Reports (FILE 11.10D2)

Action: Receive and file the reports.

C. Blanket Order Increase for Helicopter Maintenance and Repair Services (FILE 19.10C)

Action:

Approve and authorize the Purchasing Manager to increase the annual blanket order amounts for contract Year Four and Year Five by \$469,000 to a new total not to exceed \$1,269,000 annually (\$2,538,000 aggregate through November 30, 2023).

D. Award of Contract for Portable Restroom/Shower Trailers (FILE 19.07B27)

Action: Approve and authorize the Purchasing Manager to award the master agreement to Ready2Go Restroom Trailers Sales, LLC. in the amount of \$165,192.75.

E. Contract Extension for Information Technology Staff Augmentation Services (FILE 19.08A2a)

Action: Approve and authorize the Purchasing Manager to extend the current Professional Services Agreement with Computer Aid, Inc. for three additional years through March 3, 2025, to allow for the completion of the Community Risk Reduction automation project with no changes to the total contract aggregate amount.

F. Blanket Order Contract Increase for Diesel Equipment Parts and Repair Services (FILE 19.09)

Action: Approve and authorize the Purchasing Manager to increase the blanket order contract amount with Harbor Diesel and Equipment, Inc. by \$25,000 to a total not to exceed \$225,000 annually for the contract ended November 30, 2021, and for the final renewal term beginning December 1, 2021.

3. DISCUSSION CALENDAR

None.

CLOSED SESSION

None.

COMMITTEE MEMBER COMMENTS

The Committee offered no comments.

ADJOURNMENT – Chair Shawver adjourned the meeting at 5:36 p.m. The next regular meeting of the Orange County Fire Authority Executive Committee is scheduled for Thursday, February 24, 2022, at 5:30 p.m.

Maria D. Huizar, CMC
Clerk of the Authority

MINUTES ORANGE COUNTY FIRE AUTHORITY

**Executive Committee
Concurrent Joint Special Meeting
Thursday, January 27, 2022
9:52 P.M.**

**Regional Fire Operations and Training Center
Board Room
1 Fire Authority Road
Irvine, CA 92602**

CALL TO ORDER

A Concurrent Joint Special Meeting of the Orange County Fire Authority Board of Directors, Executive Committee, Budget and Finance Committee, and the Human Resources Committee was called to order on January 27, 2022, at 9:52 p.m. by Board of Directors Chair Dave Shawver.

ROLL CALL

Present: Dave Shawver, Stanton, Chair
Michele Steggell, La Palma, Vice Chair
Noel Hatch, Laguna Woods*
Gene Hernandez, Yorba Linda*
John O'Neill, Garden Grove*
Donald P. Wagner, County of Orange*

Absent: Shelley Hasselbrink, Los Alamitos

Also present were:

Fire Chief Brian Fennessy
Deputy Chief Kenny Dossey
Assistant Chief Lori Smith
Assistant Chief Jim Ruane
Assistant Chief Stephanie Holloman
Clerk of the Authority, Maria D. Huizar

Deputy Chief Lori Zeller
Assistant Chief Robert Cortez
Assistant Chief Randy Black
Assistant Chief Phil Johnson
General Counsel David Kendig

**Those members attending via Teleconferencing*

1. PRESENTATIONS

None.

2. CONSENT CALENDAR

A. Findings Required by AB 361 for the Continued Use of Teleconferencing for Meetings of the Executive Committee (FILE 11.03)

On motion of Director O'Neill and second by Director Hernandez, and following a roll call vote, declared passed 6-0 (Director Hasselbrink absent) to make the following findings by majority vote of the Committee:

- a. A state of emergency has been proclaimed by California's Governor due to the COVID-19 pandemic and continues in effect; and
- b. The Committee has reconsidered the circumstances of the state of emergency; and
- c. State and local officials continue to recommend measures to promote social distancing to slow the spread of COVID-19.

3. DISCUSSION CALENDAR

None.

REPORTS

None.

COMMITTEE MEMBER COMMENTS

None.

ADJOURNMENT – Chair Shawver adjourned the meeting at 9:56 p.m. The next regular meeting of the Orange County Fire Authority Executive Committee is scheduled for Thursday, February 24, 2022, at 5:30 p.m.

Maria D. Huizar, CMC
Clerk of the Authority



Orange County Fire Authority
AGENDA STAFF REPORT

Executive Committee Meeting
February 24, 2022

Agenda Item No. 2B
Consent Calendar

Monthly Investment Reports

Contact(s) for Further Information

Robert Cortez, Assistant Chief,
Business Services Department

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Treasury & Financial Planning

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James Slobojan, Assistant Treasurer
Treasury & Financial Planning

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714.573.6305

Summary

This agenda item is a routine transmittal of the monthly investment reports submitted to the Committee in compliance with the investment policy of the Orange County Fire Authority and with Government Code Section 53646.

Prior Board/Committee Action

On February 9, 2022, the Budget and Finance Committee reviewed the proposed agenda item and directed staff to place on the Executive Committee agenda for approval by a vote of 8-0.

RECOMMENDED ACTION(S)

Receive and file the reports.

Impact to Cities/County

Not Applicable.

Fiscal Impact

Not Applicable.

Background

Attached is the final monthly investment report for the month ended December 31, 2021. A preliminary investment report as of January 21, 2022, is also provided as the most complete report that was available at the time this agenda item was prepared.

Attachment(s)

Final Investment Report – December 2021/Preliminary Report – January 2022

Orange County Fire Authority Monthly Investment Report



Final Report – December 2021

Preliminary Report – January 2022



Monthly Investment Report Table of Contents

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Orange County Fire Authority

Final Investment Report

December 31, 2021



EXECUTIVE SUMMARY

Portfolio Activity & Earnings

During the month of December 2021, the size of the portfolio increased by approximately \$83.4 million to \$214.9 million. Receipts for the month totaled \$135.9 million with noteworthy Property Tax apportionment payments totaling \$108.1 million, cash contract payments totaling \$20.5 million, various grant reimbursement payments and other charges for current services totaling \$7.3 million. Total December cash outflows amounted to approximately \$52.5 million. Significant disbursements for the month included two biweekly payrolls and related benefits totaling approximately \$29.4 million and a \$14.2 million payment to OCERS as part of the UAAL paydown. The portfolio's balance is expected to decrease in January with a \$33 million payment to OCERS for the prepayment of FY 2022/23 employer contributions.

In December, the portfolio's yield to maturity (365-day equivalent) moved downward by 12 basis points to 0.32%. The effective rate of return decreased by 6 basis points to 0.37% for the month, and the average maturity of the portfolio decreased by twelve days to 21 days to maturity.

Economic News

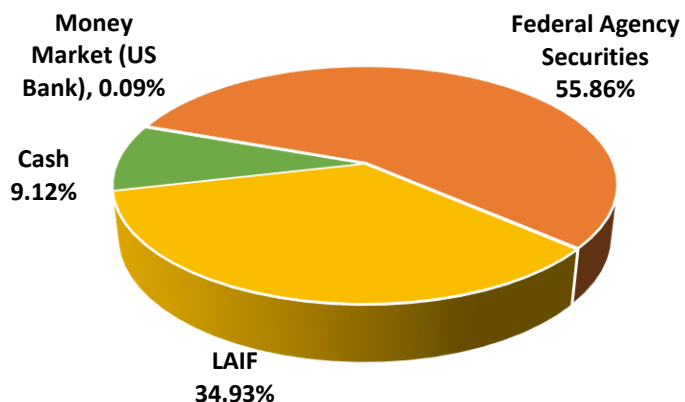
In December 2021, the unemployment rate fell by 0.3% to 3.9%. Total non-farm payroll employment rose by 199,000, and the number of unemployed persons fell to 6.3 million. U.S. Consumer confidence increased in December, signaling weaker pessimism among U.S. consumers about inflation and the coronavirus. Retail sales dropped by 1.9% in December. Data suggests that consumers got a jump on buying in the fall and overall boosted this year's holiday shopping season and potentially exaggerating the slump in the traditional December holiday sales period. Retail sales were still up 16.9% from December 2020 and jumped 19.3% for the year compared to all of 2020.

Producer prices (the prices companies pay for goods and services) increased 0.2% in December, and final demand prices rose 9.7% for the 12 months ended in December. Consumer prices increased 0.5% in December and 7% over the last 12 months, representing the largest increase since June 1982 and coming amid a shortage of goods and workers. The December 15th Federal Open Market Committee (FOMC) meeting released a statement that a majority of FOMC members expect at least three rate increases in 2022. The Fed is expected to begin increasing rates as soon as March, while reducing its bond holdings shortly thereafter. It's purchases of bonds kept rates low and money flowing into the financial markets. The Fed also reiterated that inflation data was higher and more persistent than anticipated and that inflation poses a strong risk to economic growth.

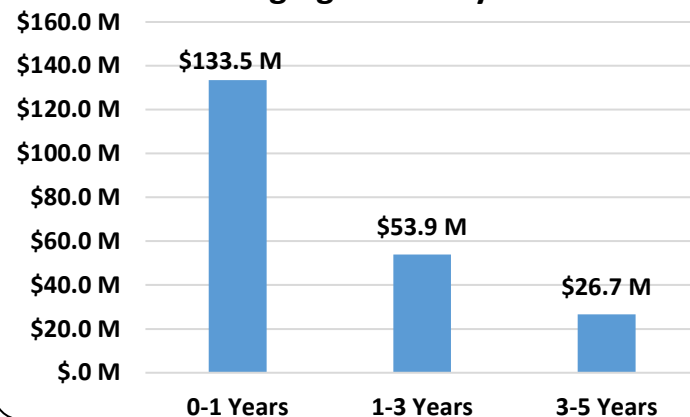


OCFA'S PORTFOLIO IS EXCEEDING BOTH THE LAIF AND TREASURY BENCHMARKS AS OF DECEMBER 31, 2021

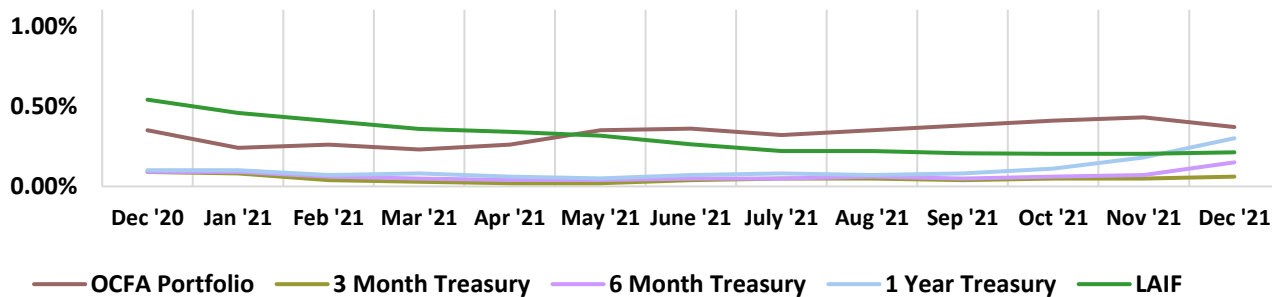
Market Value \$214,171,314



Aging Summary



12 Month Benchmarks



**BENCHMARK COMPARISON AS OF NOVEMBER 30, 2021**

3 Month T-Bill: 0.06%

1 Year T-Bill: 0.30%

6 Month T-Bill: 0.15%

LAIF: 0.212%

OCFA Portfolio: 0.37%

PORTFOLIO SIZE, YIELD, & DURATION

	<u><i>Current Month</i></u>	<u><i>Prior Month</i></u>	<u><i>Prior Year</i></u>
<i>Book Value</i>	214,981,240	131,549,837	\$207,265,868
<i>Yield to Maturity (365 day)</i>	0.322%	0.44%	0.26%
<i>Effective Rate of Return</i>	0.37%	0.43%	0.35%
<i>Days to Maturity</i>	21	33	27



ORANGE COUNTY FIRE AUTHORITY
Portfolio Management
Portfolio Summary
December 31, 2021

	See Note 1 on page 10	See Note 2 on page 10						
Investments	Par Value	Market Value	Book Value	% of Portfolio	Term	Days to Mat./Call	YTM/Call 360 Equiv.	YTM/Call 365 Equiv.
Money Mkt Mutual Funds/Cash	191,165.45	191,165.45	191,165.45	0.10	1	1	0.010	0.010
Federal Agency Coupon Securities	81,450,000.00	80,635,202.05	81,452,325.83	41.63	1,318	27	0.553	0.561
Federal Agency Disc. -Amortizing	39,000,000.00	38,998,290.00	38,998,052.78	19.93	56	49	0.037	0.038
Local Agency Investment Funds	75,000,000.00	74,807,934.00	75,000,000.00	38.34	1	1	0.209	0.212
	195,641,165.45	194,632,591.50	195,641,544.06	100.00%	561	21	0.318	0.322
Investments								
Cash								
Passbook/Checking (not included in yield calculations)	19,538,722.49	19,538,722.49	19,538,722.49		1	1	0.000	0.000
Total Cash and Investments	215,179,887.94	214,171,313.99	215,180,266.55		561	21	0.318	0.322
Total Earnings	December 31	Month Ending	Fiscal Year To Date					
Current Year		47,125.86	285,364.58					
Average Daily Balance		149,034,054.26	150,012,216.82					
Effective Rate of Return		0.37%	0.38%					

"I certify that this investment report accurately reflects all pooled investments and is in compliance with the investment policy adopted by the Board of Directors to be effective on January 1, 2021. A copy of this policy is available from the Clerk of the Authority. Sufficient investment liquidity and anticipated revenues are available to meet budgeted expenditure requirements for the next thirty days and the next six months."

Patricia Jakubiak, Treasurer

Cash and Investments with GASB 31 Adjustment:

Book Value of Cash & Investments before GASB 31 (Above)	\$ 215,180,266.55
GASB 31 Adjustment to Books (See Note 3 on page 10)	\$ (199,026.23)
Total	\$ 214,981,240.32

ORANGE COUNTY FIRE AUTHORITY
Portfolio Management
Portfolio Details - Investments
December 31, 2021

See Note 1 on page 10

See Note 2 on page 10

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	YTM/Call 365 Mat./Call	Days to Maturity Date
Money Mkt Mutual Funds/Cash										
SYS1042	1042	First American Treasury Oblig		09/22/2021	191,165.45	191,165.45	191,165.45	0.010	0.010	1
SYS528	528	Federated Treasury Obligations		07/01/2021	0.00	0.00	0.00	0.010	0.010	1
Subtotal and Average			9,266,241.95		191,165.45	191,165.45	191,165.45		0.010	1
Federal Agency Coupon Securities										
3133EMLE0	1020	Federal Farm Credit Bank	(Continuous Call)	12/23/2020	14,000,000.00	13,926,220.00	14,000,000.00	0.190	0.190	0 09/22/2023
3133EMWH1	1030	Federal Farm Credit Bank	(Callable 4/21/2022)	04/22/2021	3,000,000.00	2,950,920.00	3,002,325.83	0.710	0.710	110 04/21/2025
3133EMXS6	1032	Federal Farm Credit Bank	(Continuous Call)	04/28/2021	12,000,000.00	11,844,120.00	12,000,000.00	0.720	0.720	0 04/28/2025
3130ALNY6	1025	Fed Home Loan Bank	(Callable 03/30/2022)	03/30/2021	8,000,000.00	7,916,480.00	8,000,000.00	0.550	0.550	88 09/30/2024
3130ALTJ3	1029	Fed Home Loan Bank	(Callable 1/8/2022)	04/22/2021	9,435,000.00	9,368,483.25	9,435,000.00	0.375	0.375	7 04/08/2024
3130ALVR2	1031	Fed Home Loan Bank	(Callable 1/23/2022)	04/23/2021	11,015,000.00	10,881,938.80	11,015,000.00	0.520	0.520	22 10/23/2024
3130AM6P2	1034	Fed Home Loan Bank	(Callable 1/29/2022)	04/29/2021	12,000,000.00	11,880,600.00	12,000,000.00	1.000	1.000	28 04/29/2026
3130AM6H0	1035	Fed Home Loan Bank	(Callable 5/11/2022)	05/11/2021	12,000,000.00	11,866,440.00	12,000,000.00	0.550	0.550	41 10/11/2024
Subtotal and Average					81,452,353.26	81,450,000.00	80,635,202.05		0.561	27
Federal Agency Disc. -Amortizing										
313385SR8	1043	Fed Home Loan Bank		12/23/2021	11,000,000.00	10,999,780.00	10,999,636.39	0.035	0.036	34 02/04/2022
313385TF3	1044	Fed Home Loan Bank		12/27/2021	15,000,000.00	14,999,550.00	14,999,200.00	0.040	0.041	48 02/18/2022
313385TV8	1045	Fed Home Loan Bank		12/23/2021	13,000,000.00	12,998,960.00	12,999,216.39	0.035	0.036	62 03/04/2022
Subtotal and Average					9,386,602.21	39,000,000.00	38,998,290.00		0.038	49
Local Agency Investment Funds										
SYS336	336	Local Agency Invstmt Fund			75,000,000.00	74,807,934.00	75,000,000.00	0.212	0.212	1
Subtotal and Average					48,928,856.85	75,000,000.00	74,807,934.00		0.212	1
Total and Average					149,034,054.26	195,641,165.45	194,632,591.50		0.322	21

ORANGE COUNTY FIRE AUTHORITY
Portfolio Management
Portfolio Details - Cash
December 31, 2021

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	YTM/C 365	Days to Mat./Call
Money Mkt Mutual Funds/Cash										
SYS10033	10033	Revolving Fund		07/01/2021	20,000.00	20,000.00	20,000.00		0.000	1
SYS4	4	Union Bank		07/01/2021	19,518,722.49	19,518,722.49	19,518,722.49		0.000	1
		Average Balance	0.00							1
Total Cash and Investments			149,034,054.26		215,179,887.94	214,171,313.99	215,180,266.55		0.322	21

Orange County Fire Authority
In Service of Others!



ORANGE COUNTY FIRE AUTHORITY
Aging Report
By Maturity Date
As of January 1, 2022

Orange County Fire Authority
 1 Fire Authority Road
 Irvine, CA 92602
 (714)573-6301

					Maturity Par Value	Percent of Portfolio	Current Book Value	Current Market Value
Aging Interval:	0 days	(01/01/2022 - 01/01/2022)	5 Maturities	0 Payments	94,729,887.94	44.14%	94,729,887.94	94,537,821.94
Aging Interval:	1 - 30 days	(01/02/2022 - 01/31/2022)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	31 - 60 days	(02/01/2022 - 03/02/2022)	2 Maturities	0 Payments	26,000,000.00	12.14%	25,998,836.39	25,999,330.00
Aging Interval:	61 - 90 days	(03/03/2022 - 04/01/2022)	1 Maturities	0 Payments	13,000,000.00	6.07%	12,999,216.39	12,998,960.00
Aging Interval:	91 - 120 days	(04/02/2022 - 05/01/2022)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	121 - 365 days	(05/02/2022 - 01/01/2023)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	366 - 1095 days	(01/02/2023 - 12/31/2024)	5 Maturities	0 Payments	54,450,000.00	25.19%	54,450,000.00	53,959,562.05
Aging Interval:	1096 days and after	(01/01/2025 -)	3 Maturities	0 Payments	27,000,000.00	12.46%	27,002,325.83	26,675,640.00
Total for			16 Investments	0 Payments		100.00	215,180,266.55	214,171,313.99



NOTES TO PORTFOLIO MANAGEMENT REPORT

- Note 1: Market value of the LAIF investment is calculated using a fair value factor provided by LAIF. The U.S. Bank Corporate Trust and Custody Department provides market values of the remaining investments.
- Note 2: Book value reflects the cost or amortized cost before the GASB 31 accounting adjustment.
- Note 3: GASB 31 requires governmental entities to report investments at fair value in the financial statements and to reflect the corresponding unrealized gains/ (losses) as a component of investment income. The GASB 31 adjustment is recorded only at fiscal year-end. The adjustment for June 30, 2021 includes an increase of \$6,222.75 to the LAIF investment and a decrease of (\$205,248.98) to the remaining investments.
- Note 4: The Federated Treasury Obligations money market mutual fund functions as the Authority's sweep account. Funds are transferred to and from the sweep account to/from OCFA's checking account in order to maintain a target balance of \$1,000,000 in checking. Since this transfer occurs at the beginning of each banking day, the checking account sometimes reflects a negative balance at the close of the banking day. The negative closing balance is not considered an overdraft since funds are available in the money market mutual fund. The purpose of the sweep arrangement is to provide sufficient liquidity to cover outstanding checks yet allow that liquidity to be invested while payment of the outstanding checks is pending.



Local Agency Investment Fund (LAIF)

As of December 31, 2021, OCFA has \$75,000,000 invested in LAIF. The fair value of OCFA's LAIF investment is calculated using a participant fair value factor provided by LAIF on a quarterly basis. The fair value factor as of December 31, 2021 is .99743912. When applied to OCFA's LAIF investment, the fair value is \$74,807,934 or \$192,066 below cost. Although the fair value of the LAIF investment is lower than cost, OCFA can withdraw the actual amount invested at any time.

LAIF is included in the State Treasurer's Pooled Money Investment Account (PMIA) for investment purposes. The PMIA market valuation at December 31, 2021 is included on the following page.



State of California

Pooled Money Investment Account

Market Valuation

12/31/2021

Carrying Cost Plus				
Description	Accrued Interest Purch.	Amortized Cost	Fair Value	Accrued Interest
United States Treasury:				
Bills	\$ 43,569,286,927.30	\$ 43,578,148,587.65	\$ 43,566,910,500.00	NA
Notes	\$ 75,086,412,242.60	\$ 75,080,652,906.63	\$ 74,687,028,500.00	\$ 109,370,054.00
Federal Agency:				
SBA	\$ 350,740,581.41	\$ 350,740,581.41	\$ 351,306,665.72	\$ 148,390.75
MBS-REMICs	\$ 6,715,516.12	\$ 6,715,516.12	\$ 6,985,051.69	\$ 30,724.20
Debentures	\$ 10,439,956,592.62	\$ 10,439,204,370.45	\$ 10,416,451,600.00	\$ 9,420,765.50
Debentures FR	\$ -	\$ -	\$ -	\$ -
Debentures CL	\$ 800,000,000.00	\$ 800,000,000.00	\$ 790,694,000.00	\$ 762,194.00
Discount Notes	\$ 19,162,958,897.16	\$ 19,165,010,905.46	\$ 19,157,738,000.00	NA
Supranational Debentures	\$ 2,219,658,716.35	\$ 2,218,983,369.12	\$ 2,204,343,500.00	\$ 6,007,849.50
Supranational Debentures FR	\$ 50,000,000.00	\$ 50,000,000.00	\$ 50,001,500.00	\$ 5,495.49
CDs and YCDs FR	\$ -	\$ -	\$ -	\$ -
Bank Notes	\$ 50,000,000.00	\$ 50,000,000.00	\$ 49,999,510.67	\$ 29,305.56
CDs and YCDs	\$ 13,350,000,416.66	\$ 13,350,000,000.00	\$ 13,346,930,419.28	\$ 6,017,777.79
Commercial Paper	\$ 11,491,501,972.14	\$ 11,495,349,152.68	\$ 11,494,513,733.35	NA
Corporate:				
Bonds FR	\$ -	\$ -	\$ -	\$ -
Bonds	\$ 310,090,245.37	\$ 309,862,368.98	\$ 307,103,440.00	\$ 1,913,014.98
Repurchase Agreements	\$ -	\$ -	\$ -	\$ -
Reverse Repurchase	\$ -	\$ -	\$ -	\$ -
Time Deposits	\$ 3,807,500,000.00	\$ 3,807,500,000.00	\$ 3,807,500,000.00	NA
PMIA & GF Loans	\$ 743,769,000.00	\$ 743,769,000.00	\$ 743,769,000.00	NA
TOTAL	\$ 181,438,591,107.73	\$ 181,445,936,758.50	\$ 180,981,275,420.71	\$ 133,705,571.77

Fair Value Including Accrued Interest

\$ 181,114,980,992.48

Repurchase Agreements, Time Deposits, PMIA & General Fund loans, and Reverse Repurchase agreements are carried at portfolio book value (carrying cost).

The value of each participating dollar equals the fair value divided by the amortized cost (0.99743912). As an example: if an agency has an account balance of \$20,000,000.00, then the agency would report its participation in the LAIF valued at \$19,948,782.39 or \$20,000,000.00 x 0.99743912.



Orange County Fire Authority

Preliminary Investment Report

January 21, 2022



ORANGE COUNTY FIRE AUTHORITY
Portfolio Management
Portfolio Summary
January 21, 2022

Orange County Fire Authority
 1 Fire Authority Road
 Irvine, CA 92602
 (714)573-6301

See Note 1 on page 19

See Note 2 on page 19

Investments	Par Value	Market Value	Book Value	% of Portfolio	Term	Days to Mat./Call	YTM/Call 360 Equiv.	YTM/Call 365 Equiv.
Money Mkt Mutual Funds/Cash	191,166.72	191,166.72	191,166.72	0.12	1	1	0.010	0.010
Federal Agency Coupon Securities	81,450,000.00	80,066,895.85	81,452,284.79	49.17	1,318	200	0.553	0.561
Federal Agency Disc. -Amortizing	39,000,000.00	38,998,940.00	38,998,892.78	23.54	56	28	0.037	0.038
Local Agency Investment Funds	45,022,050.47	44,906,754.40	45,022,050.47	27.18	1	1	0.209	0.212
	165,663,217.19	164,163,756.97	165,664,394.76	100.00%	662	105	0.338	0.342
Investments								
Cash								
Passbook/Checking (not included in yield calculations)	289,024.27	289,024.27	289,024.27		1	1	0.000	0.000
Total Cash and Investments	165,952,241.46	164,452,781.24	165,953,419.03		662	105	0.338	0.342

Total Earnings	January 21	Month Ending	Fiscal Year To Date
Current Year		35,408.50	322,853.14
Average Daily Balance		196,525,651.84	154,777,007.72
Effective Rate of Return		0.31%	0.37%

"I certify that this investment report accurately reflects all pooled investments and is in compliance with the investment policy adopted by the Board of Directors to be effective on January 1, 2022. A copy of this policy is available from the Clerk of the Authority. Sufficient investment liquidity and anticipated revenues are available to meet budgeted expenditure requirements for the next thirty days and the next six months."

 Patricia Jakubiak, Treasurer

Cash and Investments with GASB 31 Adjustment:

Book Value of Cash & Investments before GASB 31 (Above)	\$ 165,953,419.03
GASB 31 Adjustment to Books (See Note 3 on page 19)	\$ (199,026.23)
Total	\$ 165,754,392.80

ORANGE COUNTY FIRE AUTHORITY
Portfolio Management
Portfolio Details - Investments
January 21, 2022

See Note 1 on page 19

See Note 2 on page 19

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	YTM/Call 365	Days to Mat./Call	Maturity Date
Money Mkt Mutual Funds/Cash											
SYS1042	1042	First American Treasury Oblig		09/22/2021	191,166.72	191,166.72	191,166.72	0.010	0.010	1	
SYS528	528	Federated Treasury Obligations		07/01/2021	0.00	0.00	0.00	0.010	0.010	1	
Subtotal and Average			10,875,978.35		191,166.72	191,166.72	191,166.72		0.010	1	
Federal Agency Coupon Securities											
3133EMLE0	1020	Federal Farm Credit Bank (Continuous Call)		12/23/2020	14,000,000.00	13,876,100.00	14,000,000.00	0.190	0.190	10	09/22/2023
3133EMWH1	1030	Federal Farm Credit Bank (Callable 4/21/2022)		04/22/2021	3,000,000.00	2,940,990.00	3,002,284.79	0.710	0.710	89	04/21/2025
3133EMXS6	1032	Federal Farm Credit Bank (Continuous Call)		04/28/2021	12,000,000.00	11,751,720.00	12,000,000.00	0.720	0.720	1,192	04/28/2025
3130ALNY6	1025	Fed Home Loan Bank (Callable 03/30/2022)		03/30/2021	8,000,000.00	7,864,080.00	8,000,000.00	0.550	0.550	67	09/30/2024
3130ALTJ3	1029	Fed Home Loan Bank (Callable 4/8/2022)		04/22/2021	9,435,000.00	9,319,232.55	9,435,000.00	0.375	0.375	76	04/08/2024
3130ALVR2	1031	Fed Home Loan Bank (Callable 1/23/2022)		04/23/2021	11,015,000.00	10,775,093.30	11,015,000.00	0.520	0.520	1	10/23/2024
3130AM6P2	1034	Fed Home Loan Bank (Callable 1/29/2022)		04/29/2021	12,000,000.00	11,785,920.00	12,000,000.00	1.000	1.000	7	04/29/2026
3130AM6H0	1035	Fed Home Loan Bank (Callable 5/11/2022)		05/11/2021	12,000,000.00	11,753,760.00	12,000,000.00	0.550	0.550	20	10/11/2024
Subtotal and Average			81,452,304.33		81,450,000.00	80,066,895.85	81,452,284.79		0.561	200	
Federal Agency Disc. -Amortizing											
313385SR8	1043	Fed Home Loan Bank		12/23/2021	11,000,000.00	10,999,890.00	10,999,860.97	0.035	0.036	13	02/04/2022
313385TF3	1044	Fed Home Loan Bank		12/27/2021	15,000,000.00	14,999,700.00	14,999,550.00	0.040	0.041	27	02/18/2022
313385TV8	1045	Fed Home Loan Bank		12/23/2021	13,000,000.00	12,999,350.00	12,999,481.81	0.035	0.036	41	03/04/2022
Subtotal and Average			38,998,492.78		39,000,000.00	38,998,940.00	38,998,892.78		0.038	28	
Local Agency Investment Funds											
SYS336	336	Local Agency Invstmt Fund			45,022,050.47	44,906,754.40	45,022,050.47	0.212	0.212	1	
Subtotal and Average			65,198,876.37		45,022,050.47	44,906,754.40	45,022,050.47		0.212	1	
Total and Average			196,525,651.84		165,663,217.19	164,163,756.97	165,664,394.76		0.342	105	

ORANGE COUNTY FIRE AUTHORITY
Portfolio Management
Portfolio Details - Cash
January 21, 2022

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	YTM/C 365	Days to Mat./Call
Money Mkt Mutual Funds/Cash										
SYS10033	10033	Revolving Fund		07/01/2021	20,000.00	20,000.00	20,000.00		0.000	1
SYS4	4	Union Bank		07/01/2021	269,024.27	269,024.27	269,024.27		0.000	1
		Average Balance	0.00							1
Total Cash and Investments			196,525,651.84		165,952,241.46	164,452,781.24	165,953,419.03		0.342	105

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ORANGE COUNTY FIRE AUTHORITY
Aging Report
By Maturity Date
As of January 22, 2022

Orange County Fire Authority
 1 Fire Authority Road
 Irvine, CA 92602
 (714)573-6301

					Maturity Par Value	Percent of Portfolio	Current Book Value	Current Market Value
Aging Interval:	0 days	(01/22/2022 - 01/22/2022)	5 Maturities	0 Payments	45,502,241.46	27.60%	45,502,241.46	45,386,945.39
Aging Interval:	1 - 30 days	(01/23/2022 - 02/21/2022)	2 Maturities	0 Payments	26,000,000.00	15.81%	25,999,410.97	25,999,590.00
Aging Interval:	31 - 60 days	(02/22/2022 - 03/23/2022)	1 Maturities	0 Payments	13,000,000.00	7.90%	12,999,481.81	12,999,350.00
Aging Interval:	61 - 90 days	(03/24/2022 - 04/22/2022)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	91 - 120 days	(04/23/2022 - 05/22/2022)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	121 - 365 days	(05/23/2022 - 01/22/2023)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	366 - 1095 days	(01/23/2023 - 01/21/2025)	5 Maturities	0 Payments	54,450,000.00	32.59%	54,450,000.00	53,588,265.85
Aging Interval:	1096 days and after	(01/22/2025 -)	3 Maturities	0 Payments	27,000,000.00	16.10%	27,002,284.79	26,478,630.00
Total for			16 Investments	0 Payments		100.00	165,953,419.03	164,452,781.24



NOTES TO PORTFOLIO MANAGEMENT REPORT

- Note 1: Market value of the LAIF investment is calculated using a fair value factor provided by LAIF. The U.S. Bank Corporate Trust and Custody Department provides market values of the remaining investments.
- Note 2: Book value reflects the cost or amortized cost before the GASB 31 accounting adjustment.
- Note 3: GASB 31 requires governmental entities to report investments at fair value in the financial statements and to reflect the corresponding unrealized gains/ (losses) as a component of investment income. The GASB 31 adjustment is recorded only at fiscal year-end. The adjustment for June 30, 2021 includes an increase of \$6,222.75 to the LAIF investment and a decrease of (\$205,248.98) to the remaining investments.
- Note 4: The Federated Treasury Obligations money market mutual fund functions as the Authority's sweep account. Funds are transferred to and from the sweep account to/from OCFA's checking account in order to maintain a target balance of \$1,000,000 in checking. Since this transfer occurs at the beginning of each banking day, the checking account sometimes reflects a negative balance at the close of the banking day. The negative closing balance is not considered an overdraft since funds are available in the money market mutual fund. The purpose of the sweep arrangement is to provide sufficient liquidity to cover outstanding checks yet allow that liquidity to be invested while payment of the outstanding checks is pending.

GLOSSARY

INVESTMENT TERMS

Basis Point. Measure used in quoting yields on bonds and notes. One basis point is .01% of yield.

Book Value. This value may be the original cost of acquisition of the security, or original cost adjusted by the amortization of a premium or accretion of a discount. The book value may differ significantly from the security's current value in the market.

Commercial Paper. Unsecured short-term promissory notes issued by corporations, with maturities ranging from 2 to 270 days; may be sold on a discount basis or may bear interest.

Coupon Rate. Interest rate, expressed as a percentage of par or face value, that issuer promises to pay over lifetime of debt security.

Discount. The amount by which a bond sells under its par (face) value.

Discount Securities. Securities that do not pay periodic interest. Investors earn the difference between the discount issue price and the full face value paid at maturity. Treasury bills, bankers' acceptances and most commercial paper are issued at a discount.

Effective Rate of Return. Rate of return on a security, based on its purchase price, coupon rate, maturity date, and the period between interest payments.

Federal Agency Securities. Securities issued by agencies such as the Federal National Mortgage Association and the Federal Farm Credit Bank. Though not general obligations of the US Treasury, such securities are sponsored by the government and therefore have high credit ratings. Some are issued on a discount basis and some are issued with coupons.

Federal Funds. Funds placed in Federal Reserve banks by depository institutions in excess of current reserve requirements. These depository institutions may lend fed funds to each other overnight or on a longer basis. They may also transfer funds among each other on a same-day basis through the Federal Reserve banking system. Fed Funds are considered to be immediately available funds.

Fed Funds Rate. The interest rate charged by one institution lending federal funds to another.

Federal Open Market Committee. The branch of the Federal Reserve Board that determines the direction of monetary policy.

Local Agency Investment Fund (LAIF). A California State Treasury fund which local agencies may use to deposit funds for investment and for reinvestment with a maximum of \$75 million for any agency (*excluding bond funds, which have no maximum*). It offers high liquidity because

deposits can be converted to cash in 24 hours and no interest is lost. Interest is paid quarterly and the State's administrative fee cannot to exceed 1/4 of a percent of the earnings.

Market value. The price at which the security is trading and could presumably be purchased or sold.

Maturity Date. The specified day on which the issuer of a debt security is obligated to repay the principal amount or face value of security.

Money Market Mutual Fund. Mutual funds that invest solely in money market instruments (short-term debt instruments, such as Treasury bills, commercial paper, bankers' acceptances, repurchase agreements and federal funds).

Par. Face value or principal value of a bond typically \$1,000 per bond.

Rate of Return. The amount of income received from an investment, expressed as a percentage. A *market rate of return* is the yield that an investor can expect to receive in the current interest-rate environment utilizing a buy-and-hold to maturity investment strategy.

Treasury Bills. Short-term U.S. government non-interest bearing debt securities with maturities of no longer than one year. The yields on these bills are monitored closely in the money markets for signs of interest rate trends.

Treasury Notes. Intermediate U.S. government debt securities with maturities of one to 10 years.

Treasury bonds. Long-term U.S. government debt securities with maturities of 10 years or longer.

Yield. Rate of return on a bond.

Yield-to-maturity. Rate of return on a bond taking into account the total annual interest payments, the purchase price, the redemption value and the amount of time remaining until maturity.

ECONOMIC TERMS

Conference Board Consumer Confidence Index. A survey that measures how optimistic or pessimistic consumers are with respect to the economy in the near future.

Consumer Price Index (CPI). A measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care. Changes in CPI are used to assess price changes associated with the cost of living.

Durable Goods Orders. An economic indicator released monthly that reflects new orders placed with domestic manufacturers for delivery of factory durable goods such as autos and appliances in the near term or future.

Gross Domestic Product. The monetary value of all the finished goods and services produced within a country's borders in a specific time period. It includes all of private and public consumption, government outlays, investments and exports less imports that occur within a defined territory.

Industrial Production. An economic indicator that is released monthly by the Federal Reserve Board. The indicator measures the amount of output from the manufacturing, mining, electric and gas industries.

ISM Institute for Supply Management (ISM) Manufacturing Index. A monthly index that monitors employment, production inventories, new orders and supplier deliveries.

ISM Non-manufacturing Index. An index based on surveys of non-manufacturing firms' purchasing and supply executives. It tracks economic data for the service sector.

Leading Economic Index. A monthly index used to predict the direction of the economy's movements in the months to come. The index is made up of 10 economic components, whose changes tend to precede changes in the overall economy.

National Federation of Independent Business Small Business Optimism Index. An index based on surveys of small business owners' plans and expectations regarding employment, capital, inventories, economic improvement, credit conditions, expansion, and earnings trends in the near term or future.

Producer Price Index. An index that measures the average change over time in the selling prices received by domestic producers for their output.

University of Michigan Consumer Sentiment Index. An index that measures the overall health of the economy as determined by consumer opinion. It takes into account an individual's feelings toward his or her own current financial health, the health of the economy in the short term and the prospects for longer term economic growth.



Orange County Fire Authority
AGENDA STAFF REPORT

Executive Committee Meeting
February 24, 2022

Agenda Item No. 2C
Consent Calendar

Second Quarter Financial Newsletter

Contact(s) for Further Information

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Tricia Jakubiak, Treasurer Treasury & Financial Planning	triciajakubiak@ocfa.org	714.573.6301
Stuart Lam, Budget Manager Treasury & Financial Planning	stuartlam@ocfa.org	714.573.6302

Summary

This routine agenda item is submitted to provide information regarding revenues and expenditures in the General Fund and the Capital Improvement Program Funds through the second quarter of FY 2021/22.

Prior Board/Committee Action

On February 9, 2022, the Budget and Finance Committee reviewed the proposed agenda item and directed staff to place on the Executive Committee agenda for approval by a vote of 8-0.

RECOMMENDED ACTION(S)

Receive and file the report.

Impact to Cities/County

Not Applicable.

Fiscal Impact

Not Applicable.

Background

The Quarterly Financial Newsletter provides information about the General Fund's top five revenue sources as well as expenditures by department and by type. Revenues and expenditures for the Capital Improvement Program (CIP) funds are also included. Revenues and expenditures for the General and CIP Funds through the second quarter of the fiscal year are within budgetary estimates, except where noted in the attached newsletter.

Attachment(s)

Second Quarter Financial Newsletter – July 2021 to December 2021

2nd Quarter July 2021 to December 2021

Financial Newsletter

Summary

The Quarterly Financial Newsletter provides summary level information regarding the General Fund (GF) operating budget and Capital Improvement Program (CIP) budget to highlight revenue and expenditure trends and areas of note.

With the 2nd Quarter (i.e. 50%) of the fiscal year completed, both General Fund actual revenues and actual expenditures are slightly higher than anticipated. As of the end of the quarter, OCFA received 51.5% of budgeted revenues and expended 50.7% of appropriations.

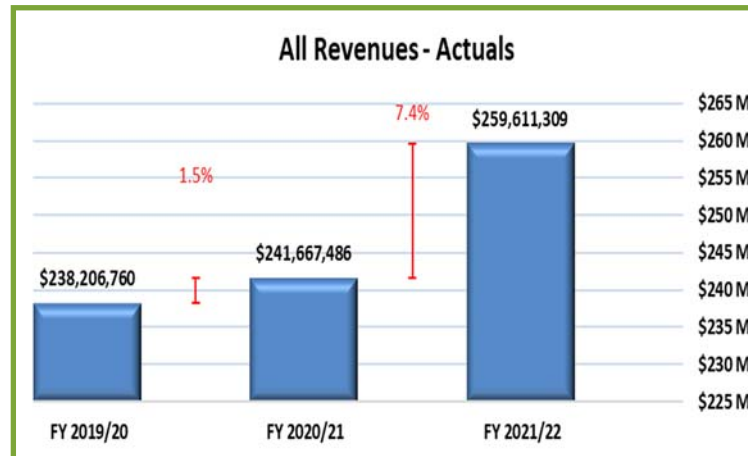
The OCFA expended 24.0% of the GF CIP, 2.3% of Fire Stations & Facilities, 11.2% of Comm. & Info. Systems, and 55.6% of the Fire Apparatus budgets. CIP expenditures are anticipated to be higher in the second half of the fiscal year as projects move beyond the planning stages.

For additional info, see attached newsletter.

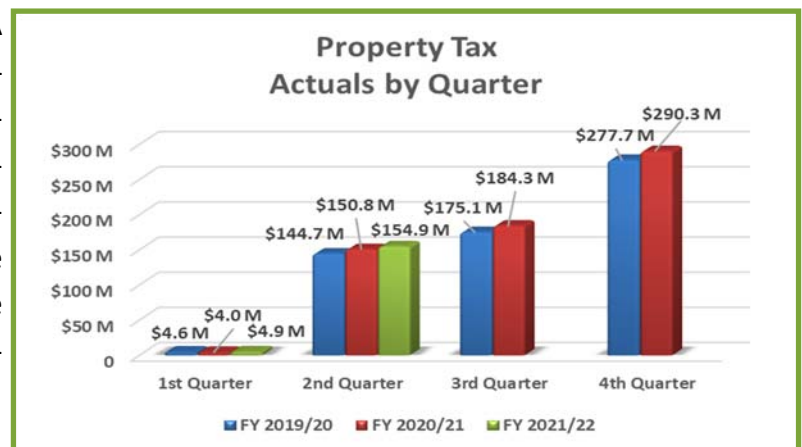


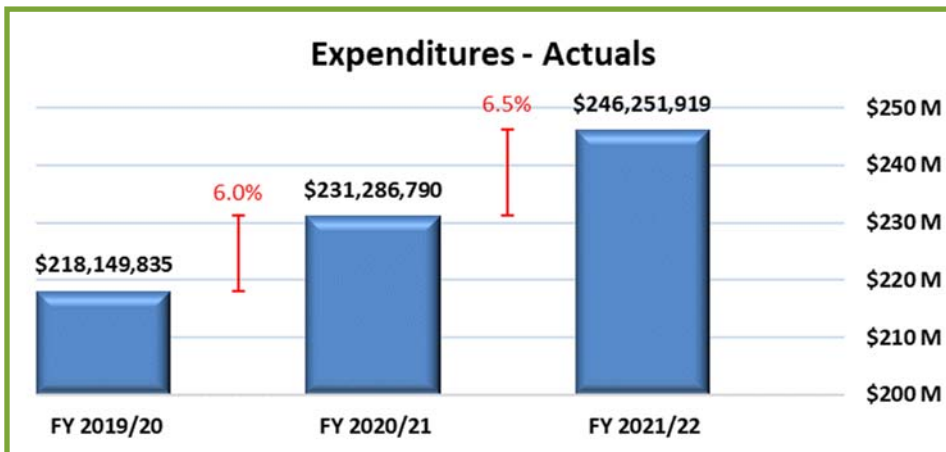
General Fund

REVENUES - General Fund revenues received as of the 2nd quarter amounted to \$259.6 million, approximately 7.4% higher than the prior year. The increase is primarily due to higher secured and unsecured property tax receipts as well as higher cash contract city, CRA pass-through, and community risk reduction fee revenue.



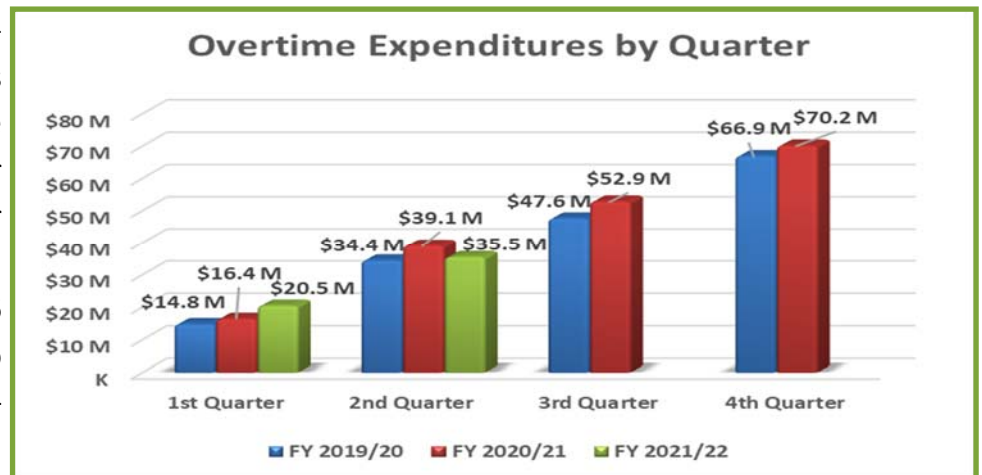
For the 2nd quarter of fiscal year 2021/22, property taxes are \$4.0 million higher when compared to the prior year. Secured property tax represents over 95% of overall property tax revenue and based on data from the Auditor-Controller, OCFA projects secured property taxes will be \$1.5 million higher than originally budgeted. Other property tax revenues are also anticipated to be \$508K higher than budgeted.





EXPENDITURES — General Fund expenditures through the 2nd quarter amounted to \$246.3 million and reflect an increase of 6.5% when compared to the prior fiscal year. Initial budget estimates projected 2nd quarter expenditures ending at \$233.9 million. Most of the budgetary variance is due to overtime costs incurred for emergency incidents which will be reimbursed. Services and supplies and equipment expenditures were in line with budgetary estimates .

The following Overtime Expenditures by Quarter chart captures historical cumulative overtime expenditures from fiscal year 2019/20 through the 2nd quarter of fiscal year 2021/22. Actual overtime expenditures are \$3.6 million lower than last year due to lower emergency incident responses when compared to fiscal year 2020/21. Major incidents



this year include the Caldor, Dixie, French, Lick Creek, River, and Willow fires. These emergency incident overtime expenditures are reimbursable. Workers compensation overtime is also trending \$2.5 million higher when compared to last fiscal year. A surge in COVID-19 related Workers' Compensation claims has contributed to the increase. Overtime expenditures will continue to be monitored.

We hope you have found this summary information illustrative and useful. Additional detailed information is included in following Newsletter pages, including progress for each of the CIP funds.



Orange County Fire Authority

Second Quarter Financial Newsletter – July 2021 to December 2021

OVERVIEW

This report covers fiscal activities in the General Fund and CIP Funds through the second quarter of Fiscal Year 2021/22. Budget figures include all budget adjustments authorized by the Board through the second quarter.

GENERAL FUND

With 50% of the year completed, General Fund revenues are 51.5% of budget and expenditures are 50.7% as shown below:

General Fund (excludes 12110)	YTD Actual	Budget	Variance in Dollars	% Variance
Revenues	259,611,309	503,654,901	244,043,592	51.5%
Expenditures	246,251,919	485,387,640	239,135,721	50.7%

Top Five Revenues. The analysis presented below compares the five largest revenue categories received through the second quarter, as compared to the budgetary estimate for this point in the fiscal year. Categories in which the variance is greater than 10% or \$1 million, are discussed below the table.

Top Five Revenues	YTD Actual Receipts	Trended YTD Budget Estimate	Variance: Actual to Budget Est. in Dollars	% Variance
Property Taxes	154,875,031	156,029,400	(1,154,369)	-1%
Cash Contracts	77,603,970	77,726,018	(122,048)	0%
State Reimbursements	8,912,364	8,500,000	412,364	5%
CRA Pass-through	9,042,542	9,491,236	(448,694)	-5%
Community Risk Reduction Fees	2,621,659	2,766,006	(144,347)	-5%
Total	253,055,566	254,512,660	(1,457,094)	-1%

- **Property Taxes** – The variance in property taxes of approximately \$1.2 million, or 1%, is a result of lower than anticipated secured property tax revenue related to the timing of payments coming later in the fiscal year compared to prior years. Based on data from the Auditor-Controller, OCFA projects property taxes will be \$2.0 million higher than originally anticipated. As such, Staff has recommended a Mid-Year Budget Adjustment to Property Tax.

Expenditures. The analysis presented below compares the actual expenditures through the second quarter, as compared to the budgetary estimate for this point in the fiscal year. Categories in which the variance is greater than 10% or \$1 million, are discussed below the table.

Expenditures by Department	YTD Actual Expenditures	Trended YTD Budget Estimate	Variance: Actual to Budget in Dollars	% Variance
Business Services	18,395,246	18,916,315	(521,069)	-3%
Command & Emergency Planning	4,459,312	4,271,945	187,367	4%
Community Risk Reduction	5,826,835	6,385,813	(558,978)	-9%
EMS & Training	6,152,254	6,198,145	(45,891)	-1%
Executive Management	8,139,536	8,309,662	(170,126)	-2%
Human Resources	6,863,295	6,685,935	177,360	3%
Logistics	16,289,925	16,579,767	(289,842)	-2%
Operations	161,570,098	147,890,436	13,679,662	9%
Special Operations	18,555,418	18,615,689	(60,271)	0%
Total	246,251,919	233,853,707	12,398,212	5%

- **Operations** – This department is exceeding budget estimates for the second quarter primarily due to backfill/overtime expenditures. Most of the budgetary variance is due to overtime costs incurred for emergency incidents which will be reimbursed. Major incidents in FY 2021/22 include the Caldor, Dixie, French, Lick Creek, River, and Willow fires. Workers' Compensation overtime is also trending \$2.5 million higher when compared to last fiscal year. A surge in COVID-19 related Workers' Compensation claims has contributed to the increase. Overtime expenditures will continue to be monitored.

Expenditures by type are outlined below, with exception details following the table:

Expenditures by Type	YTD Actual Expenditures	Trended YTD Budget Estimate	Variance: Actual to Budget in Dollars	% Variance
Salary and Employee Benefits	215,181,064	201,536,164	13,644,900	7%
Services and Supplies	30,713,335	31,982,826	(1,269,491)	-4%
Equipment	357,521	334,716	22,805	7%
Total	246,251,920	233,853,706	12,398,214	5%

- **Salary & Employee Benefits** – This category is trending over budget estimates for the second quarter by approximately \$13.6 million or 7%. This is primarily due to backfill/overtime expenditures. Most of the budgetary variance is due to overtime costs incurred for emergency incidents which will be reimbursed. Major incidents in FY 2021/22 include the Caldor, Dixie, French, Lick Creek, River, and Willow fires. Workers' Compensation overtime is also trending \$2.5 million higher when compared to last fiscal year. A surge in COVID-19 related Workers' Compensation claims has contributed to the increase. Overtime expenditures will continue to be monitored.

- **Services & Supplies** – This category is trending under budget estimates by approximately \$1.3 million or 4% due to various departments spending slightly less than projected on services and supplies through the second quarter.

CIP FUNDS

Revenues and expenditures for the Capital Improvement Program funds are summarized below. Any variances are noted following the fund table:

General Fund CIP

Fund 12110	YTD Actual	Budget	Percent
Expenditures	3,142,463	13,098,736	24.0%

- This Fund receives transfers from the General Fund as its revenue source.
- Appropriations of \$13.1 million include funding for upgrades, routine maintenance and replacement of equipment such as: enterprise phone/public address system upgrade, fire station bathroom inclusive facilities projects, data network upgrades, fire shelters, Hazmat air monitors, telephone/alarm system upgrade, replacement of PCs, laptops, tablets, printers, 800 MHz radios, VHF radios, and mobile data computers.
- Expenditures of approximately \$3.1 million are attributable to the fire station telephone/alarm/sound system upgrade, station bathroom inclusive facilities projects, data network upgrades, maintenance of the CPR chest compression devices, enterprise phone/public address system upgrade, replacement PCs, tablets and printers, VHF radios, 800 MHz radios, high pressure air bags, mobile data computers, and various IT and Property Management projects described above.

Fire Stations and Facilities

Fund 123	YTD Actual	Budget	Percent
Revenue	128,392	253,404	50.7%
Expenditures	471,379	20,318,795	2.3%

- Revenues in this fund are attributable to interest earned through the second quarter, CALFIRE contract revenue, and developer contributions of \$62K.
- Appropriations of \$20.3 million include funding for replacement of FS 10 and FS 24, RFOTC training grounds expansion and upgrade, infrastructure security enhancements, FS 49 apparatus bay floor reconstruction and retrofit of existing fire station life and safety systems.
- Expenditures of approximately \$471K are include FS 49 apparatus bay floor reconstruction, RFOTC expansion and upgrade of training grounds, and retrofit of existing fire station life and safety systems.

Communications & Information Systems

Fund 124	YTD Actual	Budget	Percent
Revenue	13,337	15,588	85.6%
Expenditures	725,852	6,466,515	11.2%

- Revenues in this fund are attributable to interest earned through the second quarter.
- Appropriations of \$6.5 million include funding for: CRR automation/IFP replacement, RFOTC data center fire suppression system upgrade, disaster recovery co-location facility, EMS enterprise system development, enterprise audio video equipment upgrades, incident reporting application replacement, and next generation CAD2CAD.
- Year to date expenditures of \$726K are primarily attributable to the disaster recovery co-location facility, RFOTC data center fire suppression system upgrade, OCFA enterprise audio-visual upgrades, EMS enterprise system development and the CRR automation/IFP replacement.

Fire Apparatus

Fund 133	YTD Actual	Budget	Percent
Revenue	1,037,871	2,784,064	37.3%
Expenditures	9,784,883	17,591,139	55.6%

- Revenues in this fund are attributable to vehicle replacement program payments from cash contract cities and interest earned through the second quarter.
- Appropriations of \$17.6 million include vehicle outfitting, 5 100' quint trucks, 2 engines, 1 air utility vehicle, 3 battalion chief command vehicles, 2 dozer tenders, 1 dozer transport trailer, 3 swift water vehicles, a heavy rescue vehicle, 5 vans, 9 utility pickups, 2 squad vehicles, 18 mid and full-size SUVs, a superintendent vehicle, and other miscellaneous emergency and support vehicles.
- Expenditures include 5 100' quint trucks, 1 developer funded truck, 2 light service trucks and outfitting costs.

SUMMARY

For more information. This summary is based on detailed information from our financial system. If you would like more information or have any questions about the report, please contact Stuart Lam, Budget Manager at 714-573-6302, or Tricia Jakubiak, Treasurer at 714-573-6301.



Orange County Fire Authority
AGENDA STAFF REPORT

Executive Committee Meeting
February 24, 2022

Agenda Item No. 2D
Consent Calendar

Contract Amendment for Ground Tree Surveys for Invasive Tree Pests

Contact(s) for Further Information

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Community Risk Reduction

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Jennifer Bower, Deputy Fire Marshal
Wildland Pre-Fire Management

jenniferbower@ocfa.org

714.573.6251

Summary

This agenda item is submitted for approval to increase and extend the previously approved grant-funded agreement with The Regents of the University of California, Division of Agriculture and Natural Resources (ANR) in an amount not to exceed \$605,056 for the three-year extended grant period through March 15, 2025. ANR will continue conducting ground tree surveys for Invasive Shot-Hole Borers (ISHB) and Gold Spotted Oak Borers (GSOB) in Orange County, monitor ISHB and GSOB presence in selected areas, and provide additional expertise and support to OCFA.

Prior Board/Committee Action(s)

At its October 25, 2018 meeting, the Board of Directors accepted a 2017 CAL FIRE ORC Invasive Tree Pest Mitigation and Fuels Reduction grant.

At its October 24, 2019 meeting, the Executive Committee approved a contract with ANR for ground survey monitoring services and to provide additional advisory services related to the grant project through March 15, 2022 in an amount not to exceed \$85,729. Subsequently, the contract was increased by \$11,975.79 (within the change order threshold delegated to management) for a new total contract value of \$97,704.79.

RECOMMENDED ACTION(S)

Approve and authorize the Purchasing Manager to increase and extend the agreement with ANR for grant-funded ground tree survey monitoring and additional advisory services by \$605,056 (Extended Year One: \$185,528, Year Two: \$205,638 and Year Three: \$213,890), for a new aggregate value not to exceed \$702,760.79 for the extended grant period through March 15, 2025.

Impact to Cities/County

Benefits are provided to all Orange County State Responsibility Area (SRA) Threat Zone communities with invasive tree pest infestations.

Fiscal Impact

Increased Cost Funded by Structural Fire Fund: \$0
Increased Cost Funded by Cash Contract Cities: \$0

Funding for this contract is available in the existing FY 2021/22 CAL FIRE Tree Pest Mitigation budget from CAL FIRE ORC Invasive Tree Pest Mitigation and Fuels Reduction grant.

Background

Contract Award

OCFA received a CAL FIRE grant to reduce the spread of invasive tree pests, reduce the accumulation of dead and dying materials caused by the tree pests, limit the spread of pests into currently non-infested areas, and reduce the related wildfire and life safety risks from invasive tree pests. Ground tree surveys and monitoring are being used to define the extent of the beetle infestation on a County-wide scale.

As a part of The Regents of the University of California, for the Division of Agriculture and Natural Resources (ANR), the UC Cooperative Extension (UCCE) is the premier agency for surveys of shot hole borers, most up-to-date reports, and research to control infestations of shot hole borers in Southern California. Currently, it provides on-the-ground tree surveys for invasive shot hole borers and gold spotted oak borers throughout Orange County and also works with a number of OCFA partners, such as OC Parks, State Parks, and the Natural Communities Coalition.

Current Request

While great progress has been made to address invasive tree pests and to improve the health of the forests in Orange County through this grant, impacts due to COVID-19 pandemic caused a substantial decrease in grant productivity and project slow down. Now that most restrictions have been lifted, OCFA has gained momentum in grant and project growth, and an extension of the grant deadline to March 15, 2025, was granted by CAL FIRE.

UCCE has been conducting ground surveys and monitoring services for the Invasive Tree Pest Mitigation and Fuels Reduction grant since November of 2019. The project has evolved, and various partners/stakeholders have increased interest in having additional areas surveyed. The additional access to areas leads to more work as increased infestation levels are discovered. OCFA seeks to continue receiving ISHB and GSOB monitoring and management services and to add coordination with partners (i.e., scheduling surveys, collecting 719 forms, sharing results, and other pertinent coordination activities), data analysis and reporting (i.e., analyze the collected data and create maps of the surveyed areas, regularly share monitoring data with OCFA, and create quarterly reports describing the activities performed during each period), and increase the number of surveyors available to keep up with the demand as additional services. The relationship built between OCFA and UCCE will maximize the continued efficiency of this project and provide the best results for a successful project throughout the extended grant period.

Recommendation

Staff is recommending approval and authorization for the Purchasing Manager to execute the proposed amendment with The Regents of the University of California, for the Division of Agriculture and Natural Resources (ANR) to continue conducting ground tree surveys for Invasive Shot-Hole Borers (ISHB) and Gold Spotted Oak Borers (GSOB) in Orange County, monitor ISHB and GSOB presence in selected areas, and to provide additional expertise and support related to the grant project in the total aggregate amount of \$702,760.79, through the extended grant period, March 15, 2025.

Attachment(s)

Amendment Two to the agreement with ANR

Agreement # Y19-4806
Page 1

AGREEMENT NO. Y19-4806

**Amendment 2 to
AGREEMENT BETWEEN
ORANGE COUNTY FIRE AUTHORITY
and
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, ANR**

THIS AGREEMENT first entered into on the 31st of October, 2019 ("Effective Date) and amended on February __, 2022, by and between Orange County Fire Authority, hereinafter called "Sponsor", and The Regents of the University of California, for the Division of Agriculture and Natural Resources, hereinafter called "ANR" is hereby amended as follows:

1. Statement of Work. In support of the project entitled "*Survey and monitoring of Invasive Shot-Borers and Gold-Spotted Oak Borer in Orange County*" and led by Beatriz Nobua-Behrman, ANR shall provide services in accordance with the amended proposal attached herewith as Exhibit A, which is incorporated herein and made a part of this agreement.
2. Term of Agreement. The term of this contract shall be from November 1, 2019 to March 15, 2025.
3. Allowable Costs. Sponsor will reimburse ANR for the performance of work under this agreement for an additional amount of \$605,056 based on the budget incorporated into this agreement as Exhibit A. Total amount not to exceed \$702,760.79.

IN WITNESS WHEREOF, the parties have executed this agreement on the day and year first written.

FOR: OCFA

**FOR: THE REGENTS OF THE
UNIVERSITY OF CALIFORNIA, ANR**

[name]
[title]

Date

Kimberly Lamar
Associate Director
Office of Contracts & Grants
Date

Exhibit A – Revised SOW /Budget

Survey and monitoring of invasive shothole borers and goldspotted oak borer in Orange County

Updated scope of work and budget

Background

The polyphagous and Kuroshio shothole Borers (collectively known as invasive shothole borers, ISHB) are invasive ambrosia beetles, native to Southeast Asia that are responsible for the death of thousands of trees in Southern California. These beetles bore into trees and create a network of tunnels in which to breed, lay eggs, and feed on the fungi that they carry with them. These fungi cause Fusarium Dieback (FD), a disease that damages a tree's ability to transport water and nutrients. The vascular stress caused by the fungal disease, combined with physical damage from the extensive beetle galleries, leads to general tree decline, and, eventually, tree death. ISHBs have been observed attacking native species, common landscape trees, and important agricultural crops like avocado. Among the most severely impacted hosts are sycamore, box elder, willows, oaks and cottonwoods.

The goldspotted oak borer (GSOB), is another invasive beetle that is currently affecting Southern California oak trees, both in urban areas and natural oak woodlands. GSOB is native to southeastern Arizona and was likely introduced via infested firewood into Southern California. GSOB preferentially attacks and kills large diameter coast live oaks (*Quercus agrifolia*), California black oaks (*Q. kelloggii*), canyon live oak (*Q. chrysolepis*) and, on rare occasions, Engelmann oak (*Q. engelmannii*). Other oak species commonly planted in southern California may also be at risk.

Current strategies for management of ISHB-FD and GSOB include extensive monitoring, chemical treatment of low and moderately infested trees, and removal of heavily infested trees that are source of new infestations. Removals should always be followed by the correct disposal of the infested plant material to prevent the spread of these dangerous pests. More information about ISHB and GSOB, including management practices and options for correct wood disposal can be found at www.ishb.org and www.gsob.org.

For the last two years, UCCE has been working with OCFA in this project, providing monitoring and management assistance regarding ISHB and/or GSOB infested trees within Orange County SRA lands and surrounding buffer zone. UCCE-Orange will continue to assist OCFA in the

fulfillment of this project. This updated scope of work describes the activities UCCE will perform as part of this agreement and the associated budget.

Coordination with Partners

UCCE and OCFA will collaborate to find areas with known or suspected ISHB or GSOB infestation. Once a new site is established, UCCE personnel will be the primary point of contact to coordinate the project's components with the site manager. This includes scheduling surveys, collecting 719 forms, sharing results, and other pertinent coordination activities.

ISHB and GSOB monitoring and management

UCCE personnel will perform monitoring and management activities in the selected sites. Monitoring activities include, but are not limited to, visual surveys and trapping of ISHB and GSOB. During visual surveys, UCCE personnel will tag and geo-reference the trees, evaluate the severity of the infestation, and collect pertinent information for each tree and the area in general. Traps will be installed in strategic points throughout the area of interest and serviced once a month. UCCE's personnel trained in ISHB and GSOB specimen identification will inspect the traps upon collection and record the number of beetles captured.

Based on the information collected during monitoring, UCCE will provide management recommendations for each site and perform management activities when necessary/pertinent. UCCE will also provide assistance during the job walks with potential contractors.

Data analysis and reporting

UCCE personnel will be responsible for analyzing the collected data and creating maps of the surveyed areas. All monitoring data will be shared regularly with OCFA. UCCE will create quarterly reports describing the activities performed during each period to be shared with OCFA and other partner agencies.

Estimated Budget – Amendment 2

<p align="center">COMPOSITE BUDGET: ESTIMATE FOR ENTIRE PROPOSED PROJECT PERIOD:03/15/2022 to 03/14/2025</p>					
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BUDGET CATEGORY	From:	3/15/22	3/15/23	3/15/24	TOTAL
	To:	3/14/23	3/14/24	3/14/25	
		Year 1	Year 2	Year 3	
PERSONNEL: <i>Salary and fringe benefits.</i>		\$139,964	\$155,276	\$161,708	\$56,948
TRAVEL		\$1,000	\$1,000	\$1,000	\$3,000
MATERIALS & SUPPLIES		\$5,000	\$5,000	\$5,000	\$15,000
OTHER DIRECT COSTS (ODC)					
	GAEL	\$1,671	\$1,929	\$2,046	\$5,646
TOTAL DIRECT COSTS		\$147,635	\$163,205	\$169,754	\$480,594
Indirect (F&A) Costs					
<i>Other Sponsored Activity - Off Campus.</i>	<u>F&A Base</u>	\$141,635	\$163,205	\$169,754	\$480,594
<i>MTDC</i>		25.00%	26.00%	26.00%	
Indirect (F&A) Costs		\$37,893	\$42,433	\$44,136	\$124,462
TOTAL ESTIMATED COSTS PER YEAR		\$185,528	\$205,638	\$213,890	
TOTAL ESTIMATED COSTS FOR PROPOSED PROJECT PERIOD					\$605,056



Orange County Fire Authority
AGENDA STAFF REPORT

Executive Committee Meeting
February 24, 2022

Agenda Item No. 2E
Consent Calendar

Contract Amendment for Archaeological and Environmental Services

Contact(s) for Further Information

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Community Risk Reduction

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Jennifer Bower, Deputy Fire Marshal
Wildland Pre-Fire Management

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714.573.6251

Summary

This agenda item is submitted for approval to extend the previously approved grant-funded agreement with The Chambers Group, Inc. for the duration of the extended grant period through March 15, 2025. The Chambers Group will continue providing archaeological and environmental consulting services in support of regulatory compliance to support the CAL FIRE Invasive Tree Pest Mitigation and Fuels Reduction Grant requirements. The extension will increase the term of the contract; however, the total contract value will remain unchanged.

Prior Board/Committee Action(s)

At its October 25, 2018 meeting, the Board of Directors accepted a 2017 CAL FIRE ORC Invasive Tree Pest Mitigation and Fuels Reduction grant.

At its November 21, 2019 meeting, the Executive Committee approved a contract with The Chambers Group for archaeological and environmental consulting services related to the grant project through March 15, 2022 in an amount not to exceed \$1,852,450.

RECOMMENDED ACTION(S)

Approve and authorize the Purchasing Manager to extend the previously approved grant-funded Professional Services Agreement with The Chambers Group, Inc. for three additional years through March 25, 2025 to allow for archaeological and environmental consulting services for the duration of the extended grant period.

Impact to Cities/County

Benefits are provided to all Orange County State Responsibility Area (SRA) Threat Zone communities with invasive tree pest infestations.

Fiscal Impact

Increased Cost Funded by Structural Fire Fund: \$0
Increased Cost Funded by Cash Contract Cities: \$0

Funding for this contract is available in the existing FY 2021/22 CAL FIRE Tree Pest Mitigation budget from CAL FIRE ORC Invasive Tree Pest Mitigation and Fuels Reduction grant.

Background

OCFA received a CAL FIRE grant to reduce the spread of invasive tree pests, reduce the accumulation of dead and dying materials caused by the tree pests, limit the spread of pests into currently non-infested areas, and reduce the related wildfire and life safety risks from invasive tree pests. Ground tree surveys and monitoring are being used to define the extent of the beetle infestation on a County-wide scale. The Chambers Group provides OCFA with professional and technical support for California Environmental Quality Act (CEQA) processes, biological services such as monitoring for nesting birds and any additional threatened or endangered species, and archaeological review to support CEQA processes.

Contract Award

In July 2019 staff issued RFP RO2378 to solicit competitive proposals for archaeological and environmental survey services. Upon completion of the proposal evaluation and interviews, The Chambers Group, Inc. was the number one ranked firm in the RFP process offering extensive service including experienced personnel, and specialized equipment. As a result of a request for Best and Final Offer (BAFO), The Chambers Group lowered their initial offer by \$134,400 and added CEQA documentation compliance review to their services.

Current Request

While great progress has been made to address invasive tree pests and to improve the health of the forests in Orange County through this grant, impacts due to COVID-19 pandemic caused a substantial decrease in grant productivity and project slow down. Now that most restrictions have been lifted, OCFA has gained momentum in grant and project growth, and an extension of the grant deadline to March 15, 2025, was granted by CAL FIRE.

Chambers Group Inc. has been conducting needed CEQA processes, biological services and archaeological reviews as requested. As the Invasive Tree Pest Grant has evolved, various partner/stakeholders have identified the additional need for surveys. This has lead to an increase in the identification of infested areas and the continued need of Chambers Group Inc.

Recommendation

Staff is recommending approval and authorization for the Purchasing Manager to execute the proposed amendment with The Chambers to continue providing archaeological and environmental consulting services in the amount not to exceed \$1,852,450, through the extended grant period, March 15, 2025.

Attachment(s)

Amendment One to the agreement with The Chambers Group

**ORANGE COUNTY FIRE AUTHORITY
AMENDMENT NUMBER ONE
TO PROFESSIONAL SERVICES AGREEMENT**

THIS AMENDMENT NUMBER ONE TO PROFESSIONAL SERVICES AGREEMENT ("Amendment One") is made and entered into this 27th day of January 2022, by and between the Orange County Fire Authority, a public agency, hereinafter referred to as "OCFA", and Chambers Group, Inc., a California Corporation, hereinafter referred to as "Firm". OCFA and Firm are sometimes hereinafter individually referred to as "Party" and are hereinafter collectively referred to as "Parties".

RECITALS

WHEREAS, OCFA requires the services of a Firm to provide as-needed archaeological and environmental services, hereinafter referred to as "Project";

WHEREAS, OCFA and Firm entered into that certain Professional Services Agreement on the 21st day of November, 2019 ("Agreement"), which is incorporated herein by this reference;

WHEREAS, based on its experience and reputation, Firm is qualified to provide the necessary services for the Project and desires to provide such services; and

WHEREAS, OCFA desires to extend the term of the Agreement for an additional term, and Firm agrees to such an extension, subject to the terms and provisions of this Amendment.

AGREEMENT

NOW THEREFORE, OCFA and Firm agree to amend the Agreement as follows:

1. Section 4.4 of the Agreement is hereby amended and restated in its entirety to read as follows:

"4.4 Term.

Unless earlier terminated in accordance with Sections 8.5 or 8.6 of this Agreement, this Agreement shall continue in full force and effect until satisfactory completion of the services but not exceeding March 15, 2025, unless extended by mutual agreement of the parties."

2. Except as modified above, all terms and conditions of the Agreement, as amended by this Amendment One, shall remain unchanged and in full force and effect.
3. The persons executing this Amendment One on behalf of the Parties warrant that they are duly authorized to execute this amendment on behalf of said Parties and

that by so executing this amendment the Parties are formally bound by the provisions of this Amendment One.

IN WITNESS WHEREOF, the Parties have executed this Amendment One as of the dates stated below.

"OCFA"

ORANGE COUNTY FIRE AUTHORITY

Date: _____

By: _____

Sara Kennedy, CPPB
Purchasing Manager

"FIRM"

CHAMBERS GROUP, INC.

Date: 1-20-2022

By:  _____

Mike McEntee
Chief Operating Officer

Date: 01/20/2022

By:  _____

Alex Gurrola
Chief Financial Officer



Orange County Fire Authority
AGENDA STAFF REPORT

Executive Committee Meeting
February 24, 2022

Agenda Item No. 2F
Consent Calendar

Approval of the California Fire and Rescue Training Authority
Urban Search & Rescue Mobilization Exercise Agreement

Contact(s) for Further Information

Kenny Dossey, Deputy Chief Emergency Operations Bureau	KennyDossey@ocfa.org	714.573.6006
Vince Carpino, Division Chief Operations Department	VincentCarpino@ocfa.org	714.573.6692
Steve Dohman, Battalion Chief US&R Program Manager	SteveDohman@ocfa.org	949.396.8106

Summary

This agreement provides OCFA with \$150,000 from the California Office of Emergency Services (CAL-OES) to perform the Urban Search & Rescue (US&R) Task Force mobilization and deployment exercise (MOBEX) in 2022.

Prior Board/Committee Action

On August 28, 2014 the Board of Directors accepted a similar agreement to carry out the 2014 mobilization and deployment exercise.

RECOMMENDED ACTION(S)

Approve and authorize the Fire Chief or his designee to execute the proposed agreement.

Impact to Cities/County

Not Applicable.

Fiscal Impact

Increased Cost Funded by Structural Fire Fund:	\$0
Increased Cost Funded by Cash Contract Cities:	\$0

\$150,000 in MOBEX funding from CAL-OES is included in the FY 2021-22 mid-year budget adjustment.

Background

California Task Force Five (CA TF-5), located in Orange County and sponsored by the Orange County Fire Authority, is one of 28 National Urban Search and Rescue (US&R) Task Forces. CA TF-5 has used past funds and activation reimbursements to equip and train the task force members for the mission of rescuing victims of natural disasters, man-made disasters, or weapons of mass destruction/terrorist responses.

Currently, CA TF5 maintains a response capability that includes apparatus and equipment supply inventory worth approximately \$8 million. There is also a personnel cadre of over 220 members,

composed of a civilian element of structural engineers, disaster canines, and physicians, as well as firefighters from the participating agencies of Anaheim, Orange and the OCFA.

California Fire and Rescue Training Authority (CFRTA) has authorized \$150,000 to each US&R Task Force for the administration of an approved National US&R Task Force mobilization and deployment exercises. Of this funding, \$25,000 is available for use immediately for planning and preparation expenses, and the other \$125,000 is available for reimbursable cost after the completion of the exercise. The US&R Task Force mobilization and deployment exercise is tentatively scheduled to take place in March of 2022.

The purpose of this agreement is to continue the development and maintenance of the National US&R response system resources to be prepared to provide qualified, competent US&R personnel in support of all US&R activities/incidents under the Federal, State, and local Response Plans.

Attachment(s)

Agreement for Task Force Deployment Exercise and Training

AGREEMENT FOR TASK FORCE DEPLOYMENT EXERCISE AND TRAINING

This Agreement for Task Force Deployment Exercise and Training ("Agreement") is made on the last date written below between the California Fire and Rescue Training Authority (hereafter "CFRTA"), a California Joint Powers Authority duly formed pursuant to Government Code §§6500 et seq., and the Orange County Fire Authority (hereafter "Department").

Recitals

1. CFRTA is desirous of having a mobilization exercise for the Urban Search and Rescue (hereafter "US&R") Task Force sponsored by DEPARTMENT.
2. DEPARTMENT has the wherewithal and has arranged to conduct training exercises during the period of March/April 2022 at facilities selected by them.
3. The State of California Governor's Office of Emergency Services (CalOES), as a member agency of CFRTA, has allocated specific funding to CFRTA for the purposes of conducting these deployment exercises.

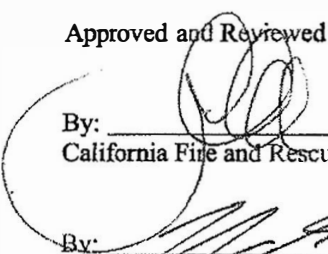
Terms and Conditions

1. DEPARTMENT will conduct a deployment exercise for the US&R Task Force consistent with the Deployment Exercise Drill Plans previously submitted to the CFRTA, attached hereto, and incorporated herein by reference.
2. At a minimum, the exercises will train and be evaluate on the following areas:
 - Establishing a Base of Operations (BoO)
 - Onsite Operations
3. DEPARTMENT will submit any changes to the Deployment Exercise Drill Plans to the designated representative of the CFRTA for approval prior to implementing the change.
4. The Department will submit a budget for the exercise to the C FRTA at least 30-days prior to commencement of the exercise for approval by the C FRTA.
5. Exercise budgets submitted by the DEPARTMENT pursuant to paragraph 4, above, may include expenditures for: personnel, expendable or consumable items, transportation of task force personnel, sanitation facilities, fuel, food, potable water, and communications.
6. Any costs incurred, and contracts entered into to fulfill this agreement must be consistent with the federal, state, and local laws applicable to the DEPARTMENT.
7. All approvals by the C FRTA must be in writing.
8. A total sum of One Hundred Fifty Thousand dollars (\$150,000) has been allocated for use by the DEPARTMENT for accomplishing the objectives identified in Paragraphs 1 and 2 of this section.
9. DEPARTMENT may spend, in advance, and be reimbursed for up to Twenty-Five Thousand dollars (\$25,000) of the total sum allocated to DEPARTMENT and consistent with Paragraphs 4 and 5 herein, for Administrative Costs as defined in Paragraph 10, below. The DEPARTMENT may invoice CFRTA for these funds.

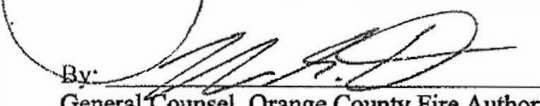
10. For the purposes of this agreement, "Administrative Costs" mean those expenses incurred by the Department for personnel expenditures that are associated with the planning, preparation, and managing of the exercise.
11. DEPARTMENT agrees to invoice CFRTA for costs associated with providing deployment exercise as specified in Paragraphs 5, 6 and 9 of this Agreement within sixty (60) days of the commencement of the exercise.
12. CFRTA agrees to pay the DEPARTMENT for all costs incurred consistent with this Agreement not to exceed the \$150,000 identified in paragraph 8.
13. No amendment or variation of the terms of this Agreement shall be valid unless made in writing, signed by the parties, and approved as required. No oral understanding or agreement not incorporated in the agreement is binding on any of the parties.

The undersigned agree to be bound by the terms of this agreement and are authorized to sign this agreement on behalf of their respective department or agency.

Approved and Reviewed by:

By: 
California Fire and Rescue Training Authority

Date: OCT 26 2021

By: 
General Counsel, Orange County Fire Authority

Date: 10/28/2021

By: _____
Fire Chief, Brian Fennessy
Orange County Fire Authority

Date: _____



Orange County Fire Authority
AGENDA STAFF REPORT

Executive Committee Meeting
February 24, 2022

Agenda Item No. 2G
Consent Calendar

**Increase Blanket Order Contract for Apparatus Bay Door
Maintenance and Repair Services**

Contact(s) for Further Information

Jim Ruane, Assistant Chief
Logistics Department

jimruane@ocfa.org

714.573.6801

Patrick Bauer, Construction &
Facilities Division Manager/Logistics Department

patrickbauer@ocfa.org

714.573.6471

Summary

This agenda item is submitted for approval of an increase to the Mako Overhead Door blanket order for the maintenance and repair of Apparatus Bay Doors located at the RFOTC and various OCFA properties due to increased costs and contract utilization.

Prior Board/Committee Action

Not Applicable

RECOMMENDED ACTION(S)

Approve and authorize the Purchasing Manager to increase blanket order contract amount with Mako Overhead Door by \$37,000 to a total not to exceed \$237,000 annually for the contract ended October 31, 2021 and for the final renewal term beginning November 1, 2021.

Impact to Cities/County

Not Applicable

Fiscal Impact

Increased Cost Funded by Structural Fire Fund: \$0

Increased Cost Funded by Cash Contract Cities: \$0

Funding is included in the FY 2021/22 General Fund Facilities Maintenance and Repair budget. The recommended action will increase the contract spending authority.

Background

On July 31, 2017, Request for Proposals (RFP) RO2220 was issued and sent to 280 registered vendors on PlanetBids with the intent to solicit proposals from qualified vendors to provide as-needed maintenance and repair services for Apparatus Bay Doors located at the RFOTC and other OCFA properties. Proposals were due August 24, 2017 and Mako Overhead Door was awarded a Maintenance and Repair Services Agreement as a result of this solicitation.

The Property Management Division is responsible for the maintenance and repair of OCFA's 22-acre headquarters, 77 fire stations, USAR Warehouse and Air Operations Hangar, and utilizes outside contractors to assist with workload as well as to perform maintenance and repair on specialty items such as apparatus bay doors. The department has seen an increase in maintenance and repairs

needed for apparatus bay doors and security gates as they increase in age, as well as a large number of emergency service requests placed outside normal business hours due to apparatus doors being a high priority for safety and security. These higher than anticipated repair volumes, along with recent increases in the cost of parts and services, have resulted in the need to increase the annual agreement amount.

Recommendation

Executive Committee approval is required for repair and maintenance service contracts in excess of \$200,000 per year, as defined in the Roles & Responsibilities Matrix. Mako has experienced significant delays in its billing process, which resulted in OCFA staff not receiving invoices for services rendered during the prior contract term in a timely fashion. As such, staff is requesting an increase to the Maintenance and Repair Services Agreement with Mako Overhead Door ending October 31, 2021 to pay for work completed. Additionally, staff is requesting approval to increase the agreement beginning November 1, 2021 by the same amount due to the sustained increase in the cost of parts.

Attachment(s)

Amendment Six to the Maintenance and Repair Services Agreement

**ORANGE COUNTY FIRE AUTHORITY
AMENDMENT NUMBER SIX
TO APPARATUS BAY DOOR MAINTENANCE AND REPAIR AGREEMENT**

THIS AMENDMENT NUMBER SIX TO APPARATUS BAY DOOR MAINTENANCE AND REPAIR AGREEMENT ("Amendment Six") is made and entered into this ___ day of February 2022, by and between the Orange County Fire Authority, a public agency, hereinafter referred to as "OCFA", and Mako Overhead Door Inc., a California Corporation, hereafter referred to as "Contractor". OCFA and Contractor are sometimes hereinafter collectively referred to as "Parties".

RECITALS

WHEREAS, OCFA requires the services of a contractor to provide apparatus bay door maintenance and repair services, hereinafter referred to as "Project";

WHEREAS, OCFA and Contractor entered into that certain Apparatus Bay Door Maintenance and Repair Agreement on the 26th day of October, 2017 ("Original Agreement"), which is incorporated herein by this reference;

WHEREAS, the Original Agreement was subsequently amended by mutual agreement of the Parties on August 3, 2018 ("Amendment One"), September 5, 2018 ("Amendment Two"), November 12, 2019 ("Amendment Three"), September 21, 2021 ("Amendment Four"), and October 4, 2021 (Amendment Five). The Original Agreement as modified by Amendment One, Amendment Two, Amendment Three, Amendment Four, and Amendment Five is referred to herein as the "Agreement";

WHEREAS, based on its experience and reputation, Contractor is qualified to provide the necessary services for the Project and desires to provide such services; and

WHEREAS, OCFA and Contractor desire to amend the Agreement to update the maximum contract amount from \$200,000 to \$237,000 annually.

AGREEMENT

NOW THEREFORE, OCFA and Contractor agree to amend the Agreement as follows:

1. Section 2.1 Maximum Contract Amount is hereby amended and restated in its entirety to read as follows:

For the Services rendered pursuant to this Agreement, Contractor shall be compensated and reimbursed, in accordance with the terms set forth in Exhibit "A", in an amount not to exceed \$237,000 (Two Hundred Thirty-Seven Thousand Dollars) annually. The maximum amount of OCFA's payment obligation under this Agreement is the amount specified in this section ("Maximum Contract Amount").

2. Except as modified above, all terms and conditions of the Agreement, as amended by this Amendment Six, shall remain unchanged and in full force and effect.
3. The persons executing this Amendment Six on behalf of the Parties warrant that they are duly authorized to execute this amendment on behalf of said Parties and that by so executing this amendment the Parties are formally bound by the provisions of this Amendment Six.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the Parties have executed this Amendment Six as of the dates stated below.

“OCFA”

ORANGE COUNTY FIRE AUTHORITY

Date: _____

By: _____

Sara Kennedy, CPPB
Purchasing Division Manager

APPROVED AS TO FORM.

ATTEST:

By: David Kendig
DAVID E. KENDIG
GENERAL COUNSEL

Maria D. Huizar
Clerk of the Board

Date: February 15, 2022

“CONTRACTOR”

MAKO OVERHEAD DOOR

Date: _____

By: _____

Mike McCall, Owner

Date: _____

By: _____

Mike McCall, Sales Manager



Orange County Fire Authority
AGENDA STAFF REPORT

Executive Committee Meeting
February 24, 2022

Agenda Item No. 2H
Consent Calendar

Blanket Order Contract for Motorola 800MHz Radios

Contact(s) for Further Information

Jim Ruane, Assistant Chief/
Logistics Department

jimruane@ocfa.org

714.573.6801

Joel Brodowski, IT Division Manager
Logistics Department

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714.573.6421

Summary

This agenda item seeks approval to issue a renewal Blanket Order contract to utilize the previously approved Orange County Contract Equipment Price Book Agreement to purchase 800MHz communications equipment and related services as needed for the Countywide Coordinated Communications System from Motorola Solutions, Inc. through the current agreement term, May 20, 2025.

Prior Board/Committee Action(s)

At its October 27, 2016 meeting, the Executive Committee approved using the Orange County Contract Equipment Price Book Agreement in effect at that time for 800MHz communications equipment and related services as needed for the Countywide Coordinated Communications System provided that funding is available in the approved budget.

RECOMMENDED ACTION(S)

Approve and authorize the Purchasing Manager to issue a renewal Blanket Order contract in an amount not to exceed \$640,000 annually to Motorola Solutions, Inc. to utilize Orange County Contract Equipment and Services Price Book Agreement #MA-060-21010004 through May 20, 2025, provided that funding is available in the approved budget.

Impact to Cities/County

Not Applicable.

Fiscal Impact

Increased Cost Funded by Structural Fire Fund: \$0

Increased Cost Funded by Cash Contract Cities: \$0

Funding has been approved in the adopted FY 2021/22 Capital Improvement Program (CIP), Communications & Workplace Support General Fund CIP - Fund 12110.

Background

Countywide Coordinated Communications System (CCCS)

The 800MHz Countywide Coordinated Communications System (CCCS) is a highly complex and critical system that is proprietary to Motorola technology. The system and its components are uniquely configured for Orange County, and Motorola is the only vendor that can provide the

expertise necessary to replace and/or repair equipment in the system. As a result, OCFA has standardized on Motorola radio equipment used in the Emergency Command Center (ECC), emergency vehicles, fire stations, and by Operations personnel.

The CCCS is administered by the Orange County Sheriffs' Department (OCSD) Communications Division.

County of Orange Master Agreement

Motorola is the only radio manufacturer fully compatible with the 800MHz Countywide Coordinated Communications System (CCCS). Although the radio components are available through multiple distributors, these distributors do not possess the expertise to fully support the CCCS which is proprietary to Motorola. Any equipment purchased through a distributor would need to be programmed directly by Motorola in order to maintain compatibility with the CCCS.

The Orange County Equipment and Services Price Book includes the equipment type, models and discounted pricing to provide a coordinated communications system to the numerous agencies in the County of Orange. All equipment offered in the price book meets the operational requirements established by the 800MHz CCCS Governance Committee, 800MHz Users Group, and ensures OCFA's system compatibility with other agencies. To maintain the integrity and performance of the 800MHz CCCS, the County regularly negotiates standardized pricing for all related equipment with Motorola under the Orange County Equipment Price Book. Purchasing directly through the price book yields discounts of up to 27.5% depending on the equipment purchased. The Price Book Agreement currently in effect, #MA-060-2101004, establishes pricing through May 2025.

Recommendation

Based on the discounted pricing and demonstrated expertise offered by Motorola, staff is recommending approval to authorize the Purchasing Manager to issue a renewal Blanket Order contract in an amount not to exceed \$640,000 annually to Motorola Solutions, Inc. utilizing the County Contract Equipment and Services Price Book Agreement #MA-060-2101004 through the current agreement term, May 20, 2025, provided that funding is available in the approved budget.

Attachment(s)

Orange County Contract Equipment and Services Price Book Agreement #MA-060-2101004
(Contract posted online and hard copy available in the Clerk's Office upon request)

ORANGE COUNTY EQUIPMENT AND SERVICES PRICE BOOK AGREEMENT # MA-060-21010004

800 MHZ COUNTYWIDE COORDINATED COMMUNICATIONS SYSTEM



The design, technical, pricing, and other information ("Information") furnished with this submission is proprietary information of Motorola Solutions, Inc. ("Motorola") and is submitted with the restriction that it is to be used for evaluation purposes only. To the fullest extent allowed by applicable law, the Information is not to be disclosed publicly or in any manner to anyone other than those required to evaluate the Information without the express written permission of Motorola.

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INTRODUCTION

Motorola is pleased to present the **Orange County Equipment Price Book**. The equipment type, models and prices shown are from Motorola's **Agreement # MA-060-21010004, Dated May 21, 2020** to provide a coordinated communications system to the numerous agencies in the County of Orange. Motorola agrees to offer equipment and contract prices contained within the price book to any other public agency (i.e., city, district, public authority, public agency, authorized private agencies, municipality and other political sub-division or public corporation of California). Each agency may contract directly through Motorola for equipment as required.

All equipment offered in the price book meets the operational requirements established by the 800 MHz CCCS Governance Committee and 800 MHz Users Group for system compatibility. The price book contains a brief overview of the 800 MHz CCCS Voice System, recommended products, and descriptions.

The Terms and Conditions of the Price Book will not change unless both the County and Motorola agree to changes in writing.

However, products and services in the Price Book will change as products are cancelled and new products are released.

Division Director

Dave Fontneau

Administration

Phone: (714) 704-7919

dfontneau@ocsd.org

Senior Telecom Engineer

Nicolas Condaras

Technical Services Unit

Programming, Installation, and Repair for
Mobiles and Dispatch Centers

Phone: (714) 704-7953

ncondaras@ocsd.org

Senior. Telecom Engineer

Erik Schull

Emergency Communications Unit

Special Projects and RACES

Phone : (714) 704-7937

eschull@ocsd.org

Emergency Training Coordinator

Peter Jimenez

Emergency Communication Coordinator

Training Officer and Mutual Aid Programming
Requests

714-704-8080

pjimenez@ocsd.org

For 800 MHz CCCS policies, radio programming, training and system information, contact the appropriate person above.

**For Product, Equipment, System Engineering, or Service information,
please contact the specific Motorola Representative listed below:**

Motorola Representative Contact Information	
<p><u>Kim Caplan—Senior Account Manager</u></p> <p>Mobile: (858) 442-3979 Fax: (760) 630-4119 Email: kim.caplan@motorolasolutions.com</p> <p>For Quantity Discounts Please Contact Kim Caplan.</p>	
<p><u>Andrew Gretencord—Inside Sales</u></p> <p>Contact for:</p> <ul style="list-style-type: none"> ▪ Quotes, questions on existing orders/status of orders/purchase orders <p>Phone: (872) 242-5370 andrew.gretencord@motorolasolutions.com</p>	<p><u>Motorola Parts</u></p> <p>Contact for:</p> <ul style="list-style-type: none"> ▪ To check on parts availability, compatibility, part number replacements <p>Phone: (800) 422-4210 Option #3</p>
<p><u>Customer Care</u></p> <p>Contact for:</p> <ul style="list-style-type: none"> ▪ Opening Cases ▪ Phone: (800)227-6772 <p>Customercare.services@motorolasolutions.com</p>	<p><u>Tattu Bekenova-Accounts Receivable Specialist</u></p> <p>Contact for:</p> <ul style="list-style-type: none"> ▪ Invoice Questions <p>Phone: (631)883-4244 Tattybubu.bekonova@motorolasolutions.com</p>
<p><u>Shop Motorola</u></p> <p>Contact for:</p> <ul style="list-style-type: none"> ▪ Ordering Accessories Online ▪ Website: https://shop.motorolasolutions.com/ 	<p><u>Anna Kocol —Credit Analyst</u></p> <p>Contact for:</p> <ul style="list-style-type: none"> ▪ Billing Questions <p>Phone: (631) 729-2492 anna.kocol@motorolasolutions.com</p>



EXHIBIT A: SYSTEM OVERVIEW

2.1 800 MHZ COUNTYWIDE COORDINATED COMMUNICATIONS SYSTEM (CCCS)

2.2 800 MHZ CCCS RADIO SYSTEM

The 800 MHz Countywide Coordinated Communications System (800 MHz CCCS) participating public safety and public service organizations provide the existing radio communication system throughout Orange County with the Motorola *ASTRO* Digital/Analog Trunked 800 MHz *SmartZone* radio system.

2.3 800 MHZ CCCS RADIO SYSTEM CAPABILITIES

- Provides Countywide agency interoperability
- Provides expanded coverage throughout the County
- Provides improved emergency response for all citizens in Orange County
- Increases personnel safety and productivity
- Enhances mutual aid communications capability
- Improves ability to respond to major disasters (i.e., fires, floods)

The 800 MHz CCCS provides effective and reliable radio communications for routine interagency operations as well as interagency communications throughout the region during mutual aid and disaster operations.

Public Safety includes all law enforcement, fire service, EMS, lifeguard and disaster preparedness agencies in Orange County.

Public Service includes other participating organizations in Orange County whose primary responsibility is providing non-public safety services.

2.4 CONVENTIONAL MUTUAL SYSTEM

A separate 800 MHz Conventional Mutual Aid System was implemented, to provide Mutual Aid communications capabilities at the local, County, Regional, State and National levels.

3.1 EXHIBIT A: WARRANTY, SERVICES AND OPTIONS

3.2 MOTOROLA PARTS DEPARTMENT

Call 1 (800) 422-4210, select Option #3 for parts information & pricing.

Organization/Dept Radio Equipment Selection Worksheet					
Item	Qty	Model/Option	Description	Unit \$	Total \$
Organization Name: Address: City, State, Zip: Approved by: _____ Date: _____ Phone No: _____ Fax No: _____				Total Equip	
				Tax	
				Installation	
				Programming	
				TOTAL	

3.3 WARRANTY

3.4 PRODUCT WARRANTY

Motorola warrants that all subscriber Mobiles, Portable, Accessories, Parts and Fixed Equipment products provided in the 800 MHz CCCS “Price Book” will be free from defects in design, material, and workmanship for the Warranty Period of 1 year from date of shipment as provided in the Motorola Standard Commercial Warranty, or upon beginning of any other specified warranty period. Motorola will repair or replace defective parts free of charge, including freight, during the product warranty period. Future subsystems warranty periods will be determined at the time of purchase.

3.5 PARTS WARRANTY

For one (1) year from the date of shipment to Licensee, Motorola warrants that component parts and boards that it provides under this Agreement will be free from material defects in materials and workmanship under normal use and service.

3.6 SERVICES

Repairs under the standard 1 year warranty can be made at any qualified Motorola Service Center, or Motorola Subscriber Depots. Repairs under the 3-5 year extended warranty must be made at a Motorola Subscriber Depot. Motorola will pay for outbound shipping via Motorola’s normal shipping methods. For repair issues please call (800) 814-0601 or e-mail Motorola Customer Care at customercare.services@motorolasolutions.com.

3.7 MAINTENANCE AGREEMENT FOR SELECT SUBSCRIBER RADIOS

Motorola can offer a maintenance agreement for Motorola equipment that does not have the Essential Service option available. Maintenance costs can be obtained from your Motorola Account Manager at the time of equipment price quotation.

3.8 ENGINEERING AND TECHNICAL SERVICES

Motorola can provide engineering and technical services to help satisfy particular requirements for existing or future needs. This includes, but is not limited to Engineering, Project Management, System Technologist and Installation services. Services can be purchased via the Orange County Price Book. The cost for services can be based on an 8 hour day or quoted per task or job.

3.9 ONLINE MOTOROLA SHOP

Customers may now take advantage of ordering parts and accessories, push to talk solutions and walkie talkies online at <https://shop.motorolasolutions.com/>.



EXHIBIT A: CUSTOMER ORDER NUMBERS

4.1 CUSTOMER ORDER NUMBERS

Customer	Order Number
A	
Aliso Viejo Police Services	1036272582
Aliso Viejo Public Works	1036272582
Anaheim Fire Dept	1000404252
Anaheim Police Dept	1011860112
Anaheim Public Works	1000816415
B	
Brea Fire Dept	1012328523
Brea Police Dept	1012328525
Brea Public Works	1000816473
Buena Park Police Dept	1000557209
Buena Park Public Works	1000557176
C—E	
California State University Fullerton	1000836819
Coast Community College	1036844422
Costa Mesa Fire Dept	1000428905
Costa Mesa Police Dept	1000428905
Costa Mesa Public Works	1000428905
Cypress Police Dept	1000404335
Cypress Public Works	1000404343
Dana Point Police Services	1036124072
Dana Point Public Works	1036124072
F	
Fountain Valley (The City of)	1036460385
Fountain Valley Fire Dept	1000829567
Fountain Valley Police Dept	1000829533
Fountain Valley Public Works	1000829492

Customer	Order Number
Fullerton Fire Dept	1000404369
Fullerton Police Dept	1000816598
Fullerton Public Works	1000557259

Customer	Order Number
G—I	
Garden Grove Fire Dept	1000404400
Garden Grove Police Dept	1000404418
Garden Grove Public Works	1000404393
Huntington Beach Fire Dept	1000428632
Huntington Beach Lifeguards	1000561177
Huntington Beach Police Dept	1000561177
Huntington Beach Public Works	1000561177
Irvine Police Dept	1000324872
Irvine Public Works	1000324872
Irvine Valley College	1012565521
J—N	
John Wayne Airport	1036315506
La Habra Fire Dept	1036253003
La Habra Police Dept	1000404434
La Habra Public Works	1000404434
La Palma Police Dept	1000404468
La Palma Public Works	1000761272
Laguna Beach Fire Dept	1036127315
Laguna Beach Lifeguards	1000561424
Laguna Beach Police Dept	1000428960
Laguna Beach Public Works	1000428690
Laguna Hills Police Services	1036067610
Laguna Hills Public Works	1036067610
Laguna Niguel Police Services	1012565571
Laguna Niguel Public Works	1012565571
Laguna Woods Police Services	1036152487
Laguna Woods Public Works	1036152487

Customer	Order Number
Los Alamitos Police Dept	1000404484
Los Alamitos Public Works	1000558538
Metro Net Fire	1035477456
Newport Beach Fire Dept	1000428715
Newport Beach Lifeguards	1035041326
Newport Beach Police Dept	1012685064
Newport Beach Public Works	1000710584
O	
Orange County Coroner	1000829137
Orange County District Attorney	1036826264
Orange County Fire Authority	1000415522
Orange County Health Care Agency	1035915159
Orange County Lifeguards	1035915159
Orange County Probation	1036686072
Orange County Public Works	1012565795
Orange County Sanitation District	1000415548
Orange County Communications	1012978592
Orange County Sheriff Department	1000415530
Orange County Transportation Authority	1000218900
Orange Fire Dept	1000404509
Orange Police Dept	1000404525
Orange Public Works	1000557291
P—S	
Placentia, City of	1000404541
Placentia Police Dept	1000557308
Placentia Public Works	1000404541
Rancho Santa Margarita Police Services	1036043917
Rancho Santa Margarita Public Works	1036043917
Saddleback College	1000379786
Santa Ana Police Dept	1012338209
Santa Ana Public Works	1000428799
Santa Ana Unified School District	1035079202

Customer	Order Number
San Clemente Lifeguards	1000428731
San Clemente Police Services	1000428723
San Clemente Public Works	1000428723
San Juan Capistrano Police Services	1011360344
San Juan Capistrano Public Works	1011360344
Seal Beach Lifeguards	1000428848
Seal Beach Police Dept	1000442822
Seal Beach Public Works	1000442822
Social Services (SSA)	1036133544
Stanton Police Services	1000558760
Stanton Public Works	1000404591
Swinerton	1036923101
T—Z	
Tustin Police Dept	1000428856
Tustin Public Works	1000428856
Villa Park Police Services	1000224915
Villa Park Public Works	1035012509
Westminster Police Dept	1000428872
Westminster Public Works	1000428856
Yorba Linda Police Services	1000404567
Yorba Linda Public Works	1000404567

Note: This list is not all inclusive of the agencies currently under the 800 MHz contract. For further information, please contact Kim Caplan at 858-442-3979.



EXHIBIT A: MOBILE RADIOS

5.1 APX 6500 PROJECT 25 DIGITAL MOBILE RADIOS 700/800 MHZ



Figure 5-1:APX 6500 Enhanced Mobile Shown with O7 Control Head

From street patrols to multi-agency response APX 6500 Enhanced mobiles provide the highest level of interoperability. APX mobiles can work across multiple digital and analog networks from conventional, to SMARTNET® and SmartZone® to ASTRO® 25 providing true P25 interoperability. The APX 6500 has evolved to support newer technologies like Wi-Fi, and SmartConnect. Direct cloning with Legacy models will not be available.

Control Head Variety

The APX 6500 Enhanced mobile is available with the O7, control head, O5 control head, O2 control head and the O3 handheld control head. In addition, the APX 6500 is available in a dual control head configuration. The County recommends the O7 control head.

Enhanced Frequency Spectrum Utilization

The APX 6500 Enhanced mobile radio is designed to offer multiple frequency band solutions for perfect system optimization in congested urban areas or wider country regions. Motorola currently offers the 700/800 MHz dual band (764-870MHz), 10-35 watt variable power, VHF (136-174 MHz), UHF Range 1 (380-470 MHz) and UHF Range 2 (450-520 MHz).

RADIO PACKAGES NOT LISTED ARE 27.5% OFF LIST AND ACCESSORIES ARE 20% OFF LIST PER SECTION 9 "ADDITIONAL DISCOUNTS" SECTION OF THIS PRICE BOOK. ALL OTHER DISCOUNTS FOR PRODUCTS AND SERVICES ALSO LISTED IN SECTION 9. FOR SPEAKER MICS AND ADDITIONAL ACCESSORIES PLEASE REFER ACCESSORIES CATALOG. https://shop.motorolasolutions.com/?_ga=2.209673489.265811969.1588006669-1558378512.1587576280

5.2 APX 6500 ENHANCED MOBILE RADIO ENCRYPTION WITH DEK

Package Price: \$5,539

Model	Description
M25URS9PW1BN	APX6500 ENHANCED 7/800 MHZ MID POWER MOBILE 10-35 WATT
G51	ADD: SMARTZONE OPERATION
G806	ADD: ASTRO DIGITAL CAI OPERATION
G361	ADD: P25 TRUNKING SOFTWARE
GA00805	ADD: APX O7 CONTROL HEAD
G444	ADD: CONTROL HEAD SOFTWARE
G843	ADD: AES ENCRYPTION
G67	ADD: REMOTE MOUNT MID POWER
G335	ADD: ANT 1/4 WAVE 762-870 MHZ
W22	ADD: PALM MICROPHONE
B18	ADD: AUXILIARY SPKR 7.5 WATT
W599	ADD: 8 MODE DIRECT ENTRY
G996	ENH: OVER THE AIR PROVISIONING
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
GA00235	ADD: NO GPS ANTENNA NEEDED
GA09008	ADD: GROUP SERVICES
G78	ADD: 3 YEAR ESSENTIAL SERVICE

Note: Dash Mount Not Available With DEK.

5.3 APX 6500 ENHANCED MOBILE RADIO ENCRYPTION-NO DEK

Package Price: \$5,409

Model	Description
M25URS9PW1BN	APX6500 ENHANCED 7/800 MHZ MID POWER MOBILE 10-35 WATT
G51	ADD: SMARTZONE OPERATION
G806	ADD: ASTRO DIGITAL CAI OPERATION
G361	ADD: P25 TRUNKING SOFTWARE
GA00805	ADD: APX O7 CONTROL HEAD
G444	ADD: CONTROL HEAD SOFTWARE
G843	ADD: AES ENCRYPTION
G67	ADD: REMOTE MOUNT MID POWER
G335	ADD: ANT 1/4 WAVE 762-870 MHZ
W22	ADD: PALM MICROPHONE
B18	ADD: AUXILIARY SPKR 7.5 WATT
G996	ENH: OVER THE AIR PROVISIONING
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
GA00235	ADD: NO GPS ANTENNA NEEDED
GA09008	ADD: GROUP SERVICES
G78	ADD: 3 YEAR ESSENTIAL SERVICE
	NOTES FOR THIS RADIO CONFIGURATION ON NEXT PAGE



Note: For Dash Mount Delete G67 (Remote) and Add G66 (Dash Mount 02 WWM) Decrease the cost of the package \$145.

5.4

APX 6500 ENHANCED MOBILE RADIO-NO ENCRYPTION AND NO DEK

Package Price: \$4,528

Model	Description
M25URS9PW1BN	APX6500 ENHANCED 7/800 MHZ MID POWER MOBILE 10-35 WATT
G51	ADD: SMARTZONE OPERATION
G806	ADD: ASTRO DIGITAL CAI OPERATION
G361	ADD: P25 TRUNKING SOFTWARE
GA00805	ADD: APX O7 CONTROL HEAD
G444	ADD: CONTROL HEAD SOFTWARE
G67	ADD: REMOTE MOUNT MID POWER
G335	ADD: ANT 1/4 WAVE 762-870 MHZ
W22	ADD: PALM MICROPHONE
B18	ADD: AUXILIARY SPKR 7.5 WATT
G996	ENH: OVER THE AIR PROVISIONING
GA00235	ADD: NO GPS ANTENNA NEEDED
GA09008	ADD: GROUP SERVICES
QA05751AA	NO ENCRYPTION, CLEAR RADIO (NO ADP)
G78	ADD: 3 YEAR ESSENTIAL SERVICE

Note: For Dash Mount Delete G67 (Remote) and Add G66 (Dash Mount 02 WWM) Decrease the cost of the package \$145.

5.5

APX 6500 ENHANCED DUAL CONTROL HEAD WITH ENCRYPTION APX

Package Price: \$5,822

Model	Description	Unit Price
The following are required for dual control head option:		
M25URS9PW1BN	APX6500 ENHANCED 700/800 MHZ MID POWER MOBILE	
G806	ADD: ASTRO DIGITAL CAI OPERATION	
G51	ADD: SMARTZONE OPERATION	
G361	ADD: P25 TRUNKING SOFTWARE	
G843	ADD: AES ENCRYPTION	
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY	
GA00805	ADD: APX O7 CONTROL HEAD	
G444	ADD: CONTROL HEAD SOFTWARE	
G67	ADD: REMOTE MOUNT MID POWER	
G335	ADD: ANT 1/4 WAVE 762-870 MHZ	
W22	ADD: PALM MICROPHONE	QUANTITY 2
B18	ADD: AUXILIARY SPKR 7.5 WATT	QUANTITY 2
GA00092	ADD: DUAL-CONTROL HARDWARE	
G996	ENH: OVER THE AIR PROVISIONING	
GA09008	ADD: GROUP SERVICES	
	CONFIGURATION CONTINUED ON NEXT PAGE	

Package Price: \$5,822

Model	Description	Unit Price
GA00235	ADD: NO GPS ANTENNA NEEDED	
G78	ADD: 3 YEAR ESSENTIAL SERVICE	
Select one <u>for each</u> control head and add to price of package (QUANTITY 2):		
G618	ADD: CBL REMOTE MOUNT 10 FEET (5.1.5.1)	\$6
G628	ADD: CBL REMOTE MOUNT 17 FEET (5.1.5.2)	\$11
G610	ADD: CBL REMOTE MOUNT 30 FEET (5.1.5.3)	\$18
G609	ADD: CBL REMOTE MOUNT 50 FEET (5.1.5.4)	\$25
G607	ADD: CBL REMOTE MOUNT 75 FEET (5.1.5.5)	\$33
G879	ADD: CBL REMOTE MOUNT 115 FEET (5.1.5.6)	\$40

Note: DEK is not available with Dual Control Head Radio Package. You must order DEK Box Kit # H1835A separately. DEK box kit H1835A includes one DEK. Must order a kit for EACH control head that needs DEK hardware. Price is \$144

Dual control head always requires remote mount.

Total # of microphones must match total # of control heads ordered. Option G90 "No Mic Needed" counts as a mic option.

Total # of speakers must match total # of control heads being ordered. Option G42 "No Speaker Needed" counts as a speaker option.

Need to order 1 control cable for EACH Control Head.



5.6

APX ENHANCED 6500 MOBILE WITH 03 CONTROL HEAD 700/800 MHZ PROJECT 25 DISGUISED HAND-HELD CONTROLLER FOR PUBLIC SAFETY AND POLICE



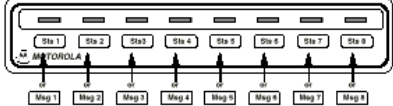
Figure 5-2:APX 6500 Mobile Shown 03 Control Head

Package Price: \$5,593

Model	Description
M25URS9PW1BN	APX6500 ENHANCED 7/800 MHZ MID POWER MOBILE 10-35 WATT
G806	ADD: ASTRO DIGITAL CAI OPERATION
G51	ADD: SMARTZONE OPERATION
G361	ADD: P25 TRUNKING SOFTWARE
G72	ADD: 03 HANDHELD CONTROL HEAD
G444	ADD: CONTROL HEAD SOFTWARE
G843	ADD: AES ENCRYPTION
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
G67	ADD: REMOTE MOUNT MID POWER
G335	ADD: ANT 1/4 WAVE 762-870 MHZ
G90	NO MICROPHONE NEEDED
B18	ADD: AUXILIARY SPKR 7.5 WATT
G996	ENH: OVER THE AIR PROVISIONING
GA00235	ADD: NO GPS ANTENNA NEEDED
GA09008	ADD: GROUP SERVICES
G78	ADD: 3 YEAR ESSENTIAL SERVICE

5.7 APX 6500 ENHANCED MOBILE ACCESSORIES AND SERVICE OPTIONS

5.8 APX 6500 ACCESSORIES

Model/Option	Description	Unit price
W599	<p>8 Status/Message (1 Supplemental Housing)</p> <p>Requires Remote Mount Configuration. This is part number and pricing if ordered with the radio.</p> 	\$144

5.9 APX 6500 ENHANCED MOBILE SERVICE OPTIONS

Model	Description	Unit Price
G78	<p>ENH: 3 ESSENTIAL SERVICE</p> <p>Provides 3 years of extended hardware repair coverage beginning after the standard warranty period expires. Repairs will be made only at the designated Motorola repair depot. Local services are not included. Motorola will pay the inbound shipping charges only with use of the Motorola designated delivery service. Motorola will pay for outbound shipping via Motorola's normal shipping methods. No discounts are allowed on this option.</p>	Included in Radio Configuration
GA00318	<p>ENH:5 YEARS ESSENTIAL SERVICE</p> <p>Provides 4 year of extended hardware repair coverage beginning after the standard warranty period expires. Repairs will be made only at the designated Motorola repair depot. Local services are not included. Motorola will pay the inbound shipping charges only with use of the Motorola designated delivery service. Motorola will pay for outbound shipping via Motorola's normal shipping methods. No discounts are allowed on this option.</p>	\$319
GA00249AC	<p>ENH: 3 YR ESSENTIAL ACCIDENTAL DAMAGE</p> <p>Provides for extended hardware repair coverage and chemical, liquid, and other physical damage on your Motorola portable and mobile subscriber radios. Comprehensive coverage starts from the first day the radio is put into use. Repairs will be made only at the designated Motorola repair depot. Local services are not included. Motorola will pay the inbound shipping charges only with use of the Motorola designated delivery service. Motorola will pay for outbound shipping via Motorola's normal shipping methods. No discounts are allowed on this option.</p>	\$506



5.10 APX 8500 MOBILE ALL BAND RADIOS



Figure 5-3: APX8500 Mobile Radio Shown with O7 Control Head

The APX 8500 mobile radio meets P25 public safety specifications for multi-agency collaboration by offering the option to operate in three separate band configurations. APX 8500 mobiles can work across multiple digital and analog networks from conventional, to SMARTNET® and SmartZone® to ASTRO® 25 providing true P25 functionality. When multiband operation is needed, the APX8500 is capable of being programmed with any three frequency bands. Only one band can be utilized at a time.

The APX 8500 all-band mobile radio combines unlimited interoperability, secure Wi-Fi connectivity and purpose-built design, enabling ease of installation and removal. It can easily connect to the VML750 LTE vehicle modem via the micro USB interface and utilize a broadband network to create an in-vehicle ecosystem for offloading data applications in the field, increasing the safety and efficiency of public safety users in and around the vehicle.

Enhanced Frequency Spectrum Utilization

The APX 8500 mobile radio is designed to offer multiple frequency band solutions for perfect system optimization in congested urban areas or wider country regions. Motorola currently offers the 700/800 MHz dual band (764-870MHz), 10-35 watt variable power, VHF (136-174 MHz), UHF Range 1 (380-470 MHz) and UHF Range 2 (450-520 MHz). Supports 1250 Channels.

Control Head Variety

The APX 8500 mobile is available with the O7 control head, O5 control head or the O3 handheld control head. The County recommends the O7 Control Head. In addition, the APX 8500 is available in a single, 2, 3, or 4 control head configuration.

RADIO PACKAGES NOT LISTED ARE 27.5% OFF LIST AND ACCESSORIES ARE 20% OFF LIST PER SECTION 9 "ADDITIONAL DISCOUNTS" SECTION OF THIS PRICE BOOK. ALL OTHER DISCOUNTS FOR PRODUCTS AND SERVICES ALSO LISTED IN SECTION 9. FOR SPEAKER MICS AND ADDITIONAL ACCESSORIES PLEASE REFER ACCESSORIES CATALOG. https://shop.motorolasolutions.com/?_ga=2.209673489.265811969.1588006669-1558378512.1587576280.

5.11 APX 8500 MULTIBAND MOBILE WITH DEK AND ENCRYPTION

Package Price: \$7,289

Model	Description
M37TSS9PW1 N	APX8500 ALL BAND MP MOBILE
G806	ENH: ASTRO DIGITAL CAI OP APX
G51	ENH: SMARTZONE OPERATION APX
G361	ADD: P25 TRUNKING SOFTWARE
GA00805	ADD: APX O7 CONTROL HEAD
G444	ADD: CONTROL HEAD SOFTWARE
G843	ADD: AES ENCRYPTION
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
B18	ADD AUXILIARY 7.5 WATT SPEAKER
G67	ADD: REMOTE MOUNT MID POWER
GA01513	ADD: ALL BAND MOBILE ANTENNA (7/8/V/U)
W22	ADD: PALM MICROPHONE
W599	ADD: 8 MODE DIRECT ENTRY
G996	ADD: PROGRAMMING OVER P25 (OTAP)
GA00235	ADD: NO GPS ANTENNA NEEDED
GA09008	ADD:GROUP SERVICES
G78	ADD: 3 YEAR ESSENTIAL SERVICE

Note: For Dash Mount- Delete G67 Remote Mount and Add G66 (Dash Mount). Reduce the cost of the radio package by \$145.

Ships with 17' cable.

5.12 APX 8500 DELETE FREQUENCY BAND (OPTIONAL)

Include all of the options from APX8500 all band mobile and add option above. Can only delete two:

Model	Description	Unit Price
GA05507	DEL: DELETE 7/800 MHZ BAND	-\$580
GA05508	DEL: DELETE VHF BAND	-\$580
GA05509	DEL: DELETE UHF BAND (DELETES BOTH UHF BANDS)	-\$580



5.13

APX 8500 MULTIBAND MOBILE-DUAL CONTROL HEAD WITH ENCRYPTION

Package Price: \$7,667

Model	Description	Unit Price
The following are required for dual control head option:		
M37TSS9PW1 N	APX8500 ALL BAND MP MOBILE	
G806	ENH: ASTRO DIGITAL CAI OP APX	
G51	ENH: SMARTZONE OPERATION APX	
G361	ADD: P25 TRUNKING SOFTWARE	
GA00092	ADD: APX DUAL-CONTRL HD HARDWARE	
GA00805	ADD: APX O7 CONTROL HEAD	
G444	ADD: CONTROL HEAD SOFTWARE	
G843	ADD: AES ENCRYPTION	
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY	
B18	ADD AUXILIARY 7.5 WATT SPEAKER	QUANTITY 2
G67	ADD: REMOTE MOUNT MID POWER	
GA01513	ADD: ALL BAND MOBILE ANTENNA (7/8/V/U)	
W22	ADD: PALM MICROPHONE	QUANTITY 2
G996	ADD: PROGRAMMING OVER P25 (OTAP)	
GA00235	ADD: NO GPS ANTENNA NEEDED	
GA09008	ADD:GROUP SERVICES	
G78	ADD: 3 YEAR ESSENTIAL SERVICE	
Select one <u>for each</u> control head and add to price of package (QUANTITY 2):		
G618	ADD: CBL REMOTE MOUNT 10 FEET (5.1.5.1)	\$6
G628	ADD: CBL REMOTE MOUNT 17 FEET (5.1.5.2)	\$11
G610	ADD: CBL REMOTE MOUNT 30 FEET (5.1.5.3)	\$18
G609	ADD: CBL REMOTE MOUNT 50 FEET (5.1.5.4)	\$25
G607	ADD: CBL REMOTE MOUNT 75 FEET (5.1.5.5)	\$33
G879	ADD: CBL REMOTE MOUNT 115 FEET (5.1.5.6)	\$40

Note: DEK is not available with Dual Control Head Radio Package. You must order DEK Box Kit # H1835A separately. DEK box kit H1835A includes one DEK. Must order a kit for EACH control head that needs DEK hardware. Price is \$144

Dual control head always requires remote mount.

Total # of microphones must match total # of control heads ordered. Option G90 "No Mic Needed" counts as a mic option.

Total # of speakers must match total # of control heads being ordered. Option G42 "No Speaker Needed" counts as a speaker option.

Need to order 1 control cable for EACH Control Head.

APX8500 can support up to four control heads.

5.14 APX 8500 DELETE FREQUENCY BAND (OPTIONAL)

Include all of the options from APX8500 all band mobile and add option on previous page. Can only delete two:

Model	Description	Unit Price
GA05507	DEL: DELETE 7/800 MHZ BAND	-\$580
GA05508	DEL: DELETE VHF BAND	-\$580
GA05509	DEL: DELETE UHF BAND (DELETES BOTH UHF BANDS)	-\$580

5.15 APX 8500 MOBILE WITH 03 CONTROL HEAD OPTION 700/800 MHZ PROJECT 25 DISGUISED HAND-HELD CONTROLLER FOR PUBLIC SAFETY AND POLICE



Figure 5-4:APX 8500 Mobile Shown with 03 Control Head

5.16 APX 8500 MOBILE ALL BAND RADIO WITH 03 CONTROL HEAD AND ENCRYPTION

Package Price: \$7,386

Model	Description
M37TSS9PW1 N	APX8500 ALL BAND MP MOBILE
G806	ENH: ASTRO DIGITAL CAI OP APX
G51	ENH: SMARTZONE OPERATION APX
G361	ADD: P25 TRUNKING SOFTWARE
G72	ADD: APX 03 CONTROL HEAD
G444	ADD: CONTROL HEAD SOFTWARE
G843	ADD: AES ENCRYPTION
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
B18	ADD AUXILIARY 7.5 WATT SPEAKER
G67	ADD: REMOTE MOUNT MID POWER
GA01513	ADD: ALL BAND MOBILE ANTENNA (7/8/V/U)
W90	ADD: NO MICROPHONE
G996	ADD: PROGRAMMING OVER P25 (OTAP)
GA00235	ADD: NO GPS ANTENNA NEEDED
G78	ADD: 3 YEAR ESSENTIAL SERVICE
GA09008	ADD:GROUP SERVICES
	NOTES FOR THIS RADIO ON NEXT PAGE

Note: For Dash Mount- Delete G67 Remote Mount and Add G66 (Dash Mount). Reduce the cost of the radio package by \$145.

Ships with 17' cable.

5.17 APX 8500 DELETE FREQUENCY BAND (OPTIONAL)

Include all of the options from APX8500 all band mobile on previous page. Can only delete two:

Model	Description	Unit Price
GA05507	DEL: DELETE 7/800 MHZ BAND	-\$580
GA05508	DEL: DELETE VHF BAND	-\$580
GA05509	DEL: DELETE UHF BAND (DELETES BOTH UHF BANDS)	-\$580

5.18 APX 8500 SERVICE OPTIONS

Model	Description	Unit Price
G78	ENH: 3 ESSENTIAL SERVICE Provides 3 years of extended hardware repair coverage beginning after the standard warranty period expires. Repairs will be made only at the designated Motorola repair depot. Local services are not included. Motorola will pay the inbound shipping charges only with use of the Motorola designated delivery service. Motorola will pay for outbound shipping via Motorola's normal shipping methods. No discounts are allowed on this option.	Included in Radio Configuration
GA00318	ENH:5 YEARS ESSENTIAL SERVICE Provides 4 year of extended hardware repair coverage beginning after the standard warranty period expires. Repairs will be made only at the designated Motorola repair depot. Local services are not included. Motorola will pay the inbound shipping charges only with use of the Motorola designated delivery service. Motorola will pay for outbound shipping via Motorola's normal shipping methods. No discounts are allowed on this option.	\$319
GA00255AF	ENH: 3 YR ESSENTIAL ACCIDENTAL DAMAGE Provides for extended hardware repair coverage and chemical, liquid, and other physical damage on your Motorola portable and mobile subscriber radios. Comprehensive coverage starts from the first day the radio is put into use. Repairs will be made only at the designated Motorola repair depot. Local services are not included. Motorola will pay the inbound shipping charges only with use of the Motorola designated delivery service. Motorola will pay for outbound shipping via Motorola's normal shipping methods. No discounts are allowed on this option.	\$506



5.19 APX 4500 MOBILE RADIO



Figure 5-5: APX 4500 Mobile Radio with O2 Control Head

APX 4500 P25 mobile radio delivers all the benefits of TDMA technology in a compact P25 capable mobile. The APX 4500 seamlessly unifies public works, utility, rural public safety and transportation users to first responders. The APX 4500 is conveniently small and easy to install. A simplified dash mount design makes installation quick and easy, fitting into the existing XTL™ footprint so you can reuse mounting holes and cables. The APX 4500 come standard with 512 programmable channels, intelligent lighting, day/night mode, built in 7.5 watt speaker and emergency button. The APX 4500 has evolved to support newer technologies like Wi-Fi. Direct cloning with Legacy models will not be available.

Control Head Variety

The APX 4500 mobile is available with a ruggedized O2 Control Head. Available colors are Black or Impact Green. Supports 512 channels.

Motorcycle Configuration

The APX 4500 is not available in a motorcycle configuration.

5.20 APX4500 MOBILE RADIO WITH ENCRYPTION

Package Price: \$4,091

Model	Description
M22URS9PW1 BN	APX4500 7/800
QA02756	ADD: 3600 OR 9600 TRUNKING BAUD SINGLE SYSTEM
G843	ADD: AES ENCRYPTION
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
GA00804	ADD: APX O2 CONTROL HEAD
G444	ADD: APX CONTROL HEAD SOFTWARE
G66	ADD: DASH MOUNT
G335	ADD: ANT 1/4 WAVE 762-870MHZ
W22	ADD: PALM MICROPHONE
B18	ADD AUXILIARY 7.5 WATT SPEAKER
G996	ADD: PROGRAMMING OVER P25 (OTAP)
GA00235	ADD: NO GPS ANTENNA NEEDED
GA09008	ADD: GROUP SERVICES
G24	ADD: 3 YEAR ESSENTIAL SERVICE

Note: For Remote Mount Delete G66 (Dash Mount) and Add G67 (Remote Mount 02 WWM) Increase the cost of the package \$145.

5.21 APX 4500 MOBILE RADIO NO ENCRYPTION

Package Price: \$3,210

Model	Description
M22URS9PW1 BN	APX4500 7/800
QA02756	ADD: 3600 OR 9600 TRUNKING BAUD SINGLE SYSTEM
GA00804	ADD: APX O2 CONTROL HEAD
G444	ADD: APX CONTROL HEAD SOFTWARE
G66	ADD: DASH MOUNT
G335	ADD: ANT 1/4 WAVE 762-870MHZ
W22	ADD: PALM MICROPHONE
B18	ADD AUXILIARY 7.5 WATT SPEAKER
G996	ADD: PROGRAMMING OVER P25 (OTAP)
GA00235	ADD: NO GPS ANTENNA NEEDED
GA09008	ADD: GROUP SERVICES
QA05751AA	NO ENCRYPTION, CLEAR RADIO (NO ADP)
G24	ADD: 3 YEAR ESSENTIAL SERVICE

Note: For Remote Mount Delete G66 (Dash Mount) and Add G67 (Remote Mount 02 WWM) Increase the cost of the package \$145.

For horn and lights external alarm on Call Alert, order Horn Honk Relay part #W116 (\$60) For either horn **OR** lights. Not Both), External Alarm Relay part #HLN6969 (\$51) and Cable part#HKN4258 (\$52).



5.22

APX 4500 SERVICE OPTIONS

Model	Description	Unit Price
G24	ENH: 3 YRS ESSENTIAL SERVICE Provides 3 years of extended hardware repair coverage beginning after the standard warranty period expires. Repairs will be made only at the designated Motorola repair depot. Local services are not included. Motorola will pay the inbound shipping charges only with use of the Motorola designated delivery service. Motorola will pay for outbound shipping via Motorola's normal shipping methods. No discounts are allowed on this option.	Included in Radio Configuration
GA00318	ENH: 5 YRS ESSENTIAL SERVICE Provides 5 years of extended hardware repair coverage beginning after the standard warranty period expires. Repairs will be made only at the designated Motorola repair depot. Local services are not included. Motorola will pay the inbound shipping charges only with use of the Motorola designated delivery service. Motorola will pay for outbound shipping via Motorola's normal shipping methods. No discounts are allowed on this option.	\$246
GA00249AC	ADD: 3Y ESSENTIAL ACCIDENTAL DAMAGE Provides for extended hardware repair coverage and chemical, liquid, and other physical damage on your Motorola portable and mobile subscriber radios. Comprehensive coverage starts from the first day the radio is put into use. Repairs will be made only at the designated Motorola repair depot. Local services are not included. Motorola will pay the inbound shipping charges only with use of the Motorola designated delivery service. Motorola will pay for outbound shipping via Motorola's normal shipping methods. No discounts are allowed on this option.	\$275

RADIO PACKAGES NOT LISTED IN PRICE BOOK ARE 27.5% OFF LIST AND ACCESSORIES ARE 20% OFF LIST PER SECTION 9 "ADDITIONAL DISCOUNTS" SECTION OF THIS PRICE BOOK. ALL OTHER DISCOUNTS FOR PRODUCTS AND SERVICES ALSO LISTED IN SECTION 9. FOR SPEAKER MICS AND ADDITIONAL ACCESSORIES PLEASE REFER ACCESSORIES CATALOG.

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5.23

APX 6500 ENHANCED HOT RED RECEIVER MOBILE RADIO

Package Price for both Red and Green Mobiles: \$11,851

Model	Description- Hot Red Mobile (Green Radio)
M25URS9PW1BN	APX6500 ENHANCED 700/800 MHZ MID POWER MOBILE 10-35 WATT
G51	ADD: SMARTZONE OPERATION
G806	ADD: ASTRO DIGITAL CAI OPERATION
GA00805	ADD: APX 07 CONTROL HEAD
G444	ADD: CONTROL HEAD SOFTWARE
G843	ADD: AES ENCRYPTION
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
G361	ADD:P25 TRUNKING
G67	ADD: REMOTE MOUNT MID POWER
G335	ADD: ANT 1/4 WAVE 762-870 MHZ
W22	ADD: PALM MICROPHONE
B18	ADD: AUXILIARY SPKR 7.5 WATT
W599	ADD: 8 MODE DIRECT ENTRY
GA001115	ADD: DUAL RADIO STACKABLE MID POWER TRUNNION
GA01113AA	ENH: DUAL RADIO OPERATION (PRIMARY RADIO)
G996	ADD: PROGRAMMING OVER P25 (OTAP)
GA00235	ADD: NO GPS ANTENNA NEEDED
GA09008	ADD:GROUP SERVICES
G24	ADD: 3 YEAR ESSENTIAL SERVICE
	GREEN RADIO PRICE \$6,264
Model	Description- Hot Red Mobile (Red Radio)
M25URS9PW1 BN	APX6500 ENHANCED 700/800 MHZ MID POWER MOBILE 10-35 WATT
G51	ADD: SMARTZONE OPERATION
G806	ADD: ASTRO DIGITAL CAI OPERATION
G361	ADD:P25 TRUNKING
G88	ADD: NO CONTROL HEAD NEEDED
G444	ADD: CONTROL HEAD SOFTWARE
G843	ADD: AES ENCRYPTION
G67	ADD: REMOTE MOUNT MID POWER
G335	ADD: ANT 1/4 WAVE 762-870 MHZ
G90	ADD: NO MICROPHONE NEEDED
B18	ADD: AUXILIARY SPKR 7.5 WATT
G996	ADD: PROGRAMMING OVER P25 (OTAP)
GA01117AA	ENH: DUAL RADIO OPERATION (SECONDARY RADIO)
GA00235	ADD: NO GPS ANTENNA NEEDED
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
GA09008	ADD:GROUP SERVICES
G24	ADD: 3 YEAR ESSENTIAL SERVICE
	RED RADIO PRICE \$5,587

NOTE: Hot Red Radio packages come with two antennas. For service plan options refer to APX6500 Service Plan Section. Will need to add plan to both green and red radios separately.



5.24

APX 6500 ENHANCED HOT RED RECEIVER MOTORCYCLE RADIO

Package Price for both Red and Green Motorcycle Mobiles: \$13,096

Model	Description- Hot Red Motorcycle (Green Radio)
M25URS9PW1BN	APX6500 ENHANCED 700/800 MHZ MID POWER MOBILE 10-35 WATT
G806	ENH: ASTRO DIGITAL CAI OP APX
G51	ENH: SMARTZONE OPERATION APX
G361	ADD: P25 TRUNKING SOFTWARE
GA09008	ADD:GROUP SERVICES
G996	ADD: PROGRAMMING OVER P25 (OTAP)
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
G843	ADD: AES ENCRYPTION
GA00805	ADD: APX O7 CONTROL HEAD.
G444	ADD: APX CONTROL HEAD SOFTWARE
G67	ADD: REMOTE MOUNT MID POWER
G174	ADD: ADD 700/800 ANTENNA
W22	ADD: MOTORCYCLE HAND MICROPHONE
B18	ADD: AUXILARY SPKR 7.5 WATT
GA01606AA	ADD: NO GPS/WIFI ANTENNA NEEDED
GA01517	DEL: NO J600 ADAPTER CABLE NEEDED
GA001115	ADD: DUAL RADIO STACKABLE MID POWER TRUNNION
G138	ADD: APX MOTORCYCLE CH SFWR
W620	ADD: NO MTRCYCLE ENCL NEEDED APX
GA01116	ADD: DUAL RADIO AUDIO COMBINER
GA01113AA	ENH: DUAL RADIO OPERATION (PRIMARY RADIO)
G78	ADD: 3 YEAR ESSENTIAL SERVICE
	GREEN RADIO PRICE \$7,099
Model	Description- Hot Red Motorcycle (Red Radio)
M25URS9PW1BN	APX6500 ENHANCED 700/800 MHZ MID POWER MOBILE 10-35 WATT
G806	ENH: ASTRO DIGITAL CAI OP APX
G51	ENH: SMARTZONE OPERATION APX
G361	ADD: P25 TRUNKING SOFTWARE
GA09008	ADD:GROUP SERVICES
G996	ADD: PROGRAMMING OVER P25 (OTAP)
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
G843	ADD: AES ENCRYPTION
G88	ADD: NO CONTROL HEAD NEEDED
G444	ADD: APX CONTROL HEAD SOFTWARE
G67	ADD: REMOTE MOUNT MID POWER
G174	ADD: ADD 700/800 ANTENNA
G90	ADD: NO MICROPHONE NEEDED
G142	ADD: NO SPEAKER NEEDED
GA01606AA	ADD: NO GPS/WIFI ANTENNA NEEDED
GA01517	DEL: NO J600 ADAPTER CABLE NEEDED
GA001117	ADD: DUAL RADIO OPERATION (SECONDARY RADIO)
	CONFIGURATION CONTINUED ON NEXT PAGE

Package Price for both Red and Green Motorcycle Mobiles: \$13,096

Model	Description- Hot Red Motorcycle (Green Radio)
G138	ADD: APX MOTORCYCLE CH SFWR
W620	ADD: NO MTRCYCLE ENCL NEEDED APX
G78	ADD: 3 YEAR ESSENTIAL SERVICE
	RED RADIO PRICE \$5,997
Model	Description- Hot Red Mobile Additional Parts
H1835A	8 MODE DIRECT ENTRY
NNTN7279B	CONTROL HEAD SUN SHADE/HOOD

NOTE: Hot Red Radio packages come with two antennas.

For service plan options refer to APX6500 Service Plan Section. Will need to add plan to both green and red radios separately.

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5.25 MOBILE CONTROL HEAD CONVERSION KITS

Kits to Convert Your Existing Control Head from Dash Mount to Remote Mount, or Remote Mount to Dash Mount

- Kits that convert a Dash Mount Control Head to a Remote Mount configurations require selecting a CAN cable option selection from below (excluding O3 CH, which does not use a CAN cable).
- Kits that change Remote to Dash take no options.

5.26 O2 CONVERSION KITS

Model	Description	Unit Price
H1879	O2 REMOTE TO O2 DASH MOUNT -Not Applicable APX8500	\$127
H1877	O2 DASH TO O2 REMOTE MOUNT-Not Applicable APX8500	\$260

5.27 O3 CONTROL HEAD CONVERSION REQUIREMENTS

In order to take an O3 Control Head from a Dash Mount to a Remote Mount, a single cable, PMLN4959, is required.

Model	Description	Unit Price
PMLN4959A	O3 ACCESSORY CABLE-Required to convert an O3 Control Head from Dash Mount to Remote Mount	\$119

5.28 O7 CONTROL HEAD CONVERSION KITS

Model	Description	Unit Price
H1880	O7 REMOTE TO O7 DASH MOUNT	\$127
H1878	O7 DASH TO O7 REMOTE MOUNT	\$260
H1925	8500 O7 REMOTE MOUNT TO DASH MOUNT	\$128
H1922	8500 O7 DASH TO REMOTE MOUNT	\$260

5.29 O3 AND O7 CONTROL HEADS (NO RADIO)

Dash mounts require one option be requested from each category below (4).

Description
Power Cable
Accessory Cable
Microphone
Speaker

Remote mounts require one option be requested from each category below (6).

Description
Power Cable
Accessory Cable
Microphone
Speaker
Transceiver Interface Board (TIB)
CAN Cable

5.30 O3 AND O7 CONTROL HEAD ORDERING INSTRUCTIONS

Model	Description	Unit Price
CONTROL HEAD TYPE	MUST SELECT ONE OF THE FOLLOWING:	
H1905	O7 CONTROL HEAD	\$506
H1902	O3 CONTROL HEAD	\$757
O3 MOUNT TYPE	MUST SELECT ONE OF THE FOLLOWING FOR O3:	
GA01284	ADD: O3 DASH OR NO MOUNT	\$0
GA01300	ADD: O3 REMOTE MOUNT	\$100
O7 MOUNT TYPE	MUST SELECT ONE OF THE FOLLOWING FOR O7:	
GA01286	ADD: O7 DASH MOUNT	\$100
GA01278	ADD: O7 REMOTE CONTROL HEAD INTERFACE BOARD	\$100
GA01585	ADD: APX8500 O7 DASH MOUNT	\$128
POWER CABLE	MUST SELECT ONE OF THE FOLLOWING FOR O3 & O7:	
GA01301	ADD: NO POWER CABLE	\$0
GA01288	ADD: POWER CABLE RADIO DASH	\$12
GA01289	ADD: POWER CABLE RADIO REMOTE	\$28
ACCESSORY CABLE	MUST SELECT ONE OF THE FOLLOWING FOR O3 & O7:	
GA01297	ADD: NO ACCESSORY CABLE	\$0
GA01295	ADD: O3 ACCESSORY CABLE	\$72
GA01296	ADD: ACCESSORY CABLE	\$24
MICROPHONE	MUST SELECT ONE OF THE FOLLOWING O3 & O7:	
G90	ADD: NO MICROPHONE NEEDED	\$0
W20	ADD: KEYPAD MIC GCAI	\$144
	ORDERING INSTRUCTIONS CONTINUED ON NEXT PAGE	
W22	ADD: STANDARD PALM MICROPHONE	\$58



Model	Description	Unit Price
SPEAKER	MUST SELECT ONE OF THE FOLLOWING O3 & O7:	
B18	ADD: AUXILARY SPEAKER 7.5 WATT	\$48
G142	ADD: NO SPEAKER NEEDED	\$0
TRANCEIVER INTERFACE BOARD (TIB) OPTIONS	Only required when Remote Mount Option is selected, or if an O3 Control Head is being Ordered . If the radio is currently configured for Remote Mount, Select GA01282, No TIB.	
GA01282	ADD: NO REMOTE TIB	\$0
GA01281	ADD: APX MP REMOTE TIB	\$140
GA01586	ADD: 8500 MP TIB	\$140
CAN CABLE	Only required when Remote Mount option is selected. Not applicable to an O3 Control Head. Must Select One.	
GA00179	ADD: NO REMOTE CABLE NEEDED	\$0
G618	ADD: REMOTE MOUNT CABLE 10 FT	\$8
G628	ADD: REMOTE MOUNT CABLE 17 FT	\$12
G610	ADD: REMOTE MOUNT CABLE 30 FT	\$20

EXHIBIT A: PORTABLE RADIOS



A.

Figure 6-1: Portable Radio
APX 6000 Model 3.5 with Full Keypad

The APX™ 6000 is the next generation of ruggedly reliable performers that gives you the advanced features. Whether you're responding to a call or racing to a fire, the APX™ 6000 puts you in greater control of your safety, response time and technology investment. Portables can work across multiple digital and analog networks from conventional, to SMARTNET® and SmartZone® to ASTRO® 25 providing true P25 functionality.

6.1 APX 6000 FEATURES

Model 3.5

The APX 6000 Model 3.5 offers 1,000 Channel Programmability, Front Color Display: 4 lines of text, 2 lines of icon, Full Keypad: 4x3 programmable button, 4 way navigation, home and data buttons, Dual Microphone, Intelligent Lighting, 3 Programmable Side buttons, Noise Cancellation Software, 1 Top Mounted Programmable 3 Position Toggle Switch, Top Display: 1 line of text, 1 line of icons, 0 lines of menu, Orange Programmable Button, 16 Position Mode Rotary Select Switch and a Universal Carry Holder.

Model 2.5

The APX 6000 Model 2.5 offers 1,000 Channel Programmability, Front Color Display: 4 lines of text, 2 lines of icon, Limited Keypad: 4 way navigation, home and data buttons, Dual Microphone, Intelligent Lighting, 3 Programmable Side buttons, Noise Cancellation Software, 1 Top Mounted Programmable 3 Position Toggle Switch, Top Display: 1 line of text, 1 line of icons, 0 lines of menu, Orange Programmable Button, 16 Position Mode Rotary Select Switch

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6.2

APX 6000 PORTABLE RADIO MODEL 3.5-WITH ENCRYPTION AND HIGH CAPACITY BATTERY**Package Price: \$5,279**

Model	Description
H98UCH9PW7BN	APX6000 700/800 MODEL 3.5 PORTABLE
Q806	ADD: ASTRO DIGITAL CAI OPERATION
H38	ADD: SMARTZONE OPERATION
Q361	ADD: P25 TRUNKING SOFTWARE
Q629	ADD: AES ENCRYPTION
Q498	ENH: ASTRO25 OTAR W/MULTIKEY
QA01833	ADD: EXTREME 1-SIDED NOISE REDUCTION
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA07576	ALT: LI-ION 4600MAH IMPRES UL BATT (PMMN4573A) 5.12"(H) 2.3" (W) 1.7"(D)
QA09008	ADD: GROUP SERVICES
H885BK	ADD: 3 YEAR ESSENTIAL SERVICE

Note: For smaller sized battery with less capacity please order # QA07578 3100 mAh IMPRES 3.4"(H) 2.3"(L) 1.8" (D) and remove #QA07576. Deduct \$21.75 from package price.

Radios will ship intrinsically safe when ordered with an IS battery.

6.3

APX 6000 PORTABLE MODEL 3.5 WITH HIGH CAPACITY BATTERY - NO ENCRYPTION**Package Price: \$4,389**

Model	Description
H98UCH9PW7BN	APX6000 700/800 MODEL 3.5 PORTABLE
Q806	ADD: ASTRO DIGITAL CAI OPERATION
H38	ADD: SMARTZONE OPERATION
Q361	ADD: P25 TRUNKING SOFTWARE
QA01833	ADD: EXTREME 1-SIDED NOISE REDUCTION
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA07576	ALT: LI-ION 4600MAH IMPRES UL BATT (PMMN4573A) 5.12"(H) 2.3" (W) 1.7"(D)
QA09008	ADD: GROUP SERVICES
QA05751AA	NO ENCRYPTION, CLEAR RADIO (NO ADP)
H885BK	ADD: 3 YEAR ESSENTIAL SERVICE

Note: For smaller sized battery with less capacity please order # QA07578 3100 mAh IMPRES 3.4"(H) 2.3"(L) 1.8" (D) and remove #QA07576. Deduct \$21.75 from package price.

Radios will ship intrinsically safe when ordered with an IS battery.

Portable radios do not come with chargers.



6.4

APX 6000 PORTABLE MODEL 2.5 WITH ENCRYPTION AND HIGH CAPACITY BATTERY**Package Price: \$4,959**

Model	Description
H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Q806	ADD: ASTRO DIGITAL CAI OPERATION
H38	ADD: SMARTZONE OPERATION
Q361	ADD: P25 TRUNKING SOFTWARE
Q629	ADD: AES ENCRYPTION
Q498	ENH: ASTRO 25 OTAR W/ MULTIKEY
QA01833	ADD: EXTREME 1-SIDED NOISE REDUCTION
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA07576	ALT: LI-ION 4600MAH IMPRES UL BATT (PMMN4573A) 5.12"(H) 2.3" (W) 1.7"(D)
QA09008	ADD: GROUP SERVICES
H885BK	ADD: 3 YEAR ESSENTIAL SERVICE

Note: For smaller sized battery with less capacity please order # QA07578 3100 mAh IMPRES 3.4"(H) 2.3"(L) 1.8" (D) and remove #QA07576. Deduct \$21.75 from package price.

Radios will ship intrinsically safe when ordered with an IS battery.

6.5

APX 6000 PORTABLE MODEL 2.5 WITH HIGH CAPACITY BATTERY - NO ENCRYPTION**Package Price: \$4,078**

Model	Description
H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Q806	ADD: ASTRO DIGITAL CAI OPERATION
H38	ADD: SMARTZONE OPERATION
Q361	ADD: P25 TRUNKING SOFTWARE
QA01833	ADD: EXTREME 1-SIDED NOISE REDUCTION
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA07576	ALT: LI-ION 4600MAH IMPRES UL BATT (PMMN4573A) 1.5"(H) 5" (L) 2"(W)
QA09008	ADD: GROUP SERVICES
QA05751AA	NO ENCRYPTION, CLEAR RADIO (NO ADP)
H885BK	ADD: 3 YEAR ESSENTIAL SERVICE

Note: For smaller sized battery with less capacity please order # QA07578 3100 mAh IMPRES 3.4"(H) 2.3"(L) 1.8" (D) and remove #QA07576. Deduct \$21.75 from package price.

Radios will ship intrinsically safe when ordered with an IS battery.

Portable radios do not come with chargers.



6.6

APX 6000 SPARE BATTERIES

Model	Description	Unit Price
PMMN4573A	LI-ION 4600MAH IMPRES UL BATT (QA07576) 1.5"(H) 5" (L) 2"(W)	\$159
PMMN4547	LI-ION 3100MAH UL BATT (QA07578) 3.4"(H) 2.3"(L) 1.8" (D)	\$135

FOR SPEAKER MICS AND ADDITIONAL ACCESSORIES PLEASE REFER TO ACCESSORIES CATALOG.ACCESSORIES NOT LISTED ARE 20% OFF LIST PRICE.
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**Figure 6-2 (A) APX 6000XE Model 2.5 (Yellow) and (B) Model 3.5 (Impact Green)
(Lower capacity battery pictured)**

APX 6000XE meets P25 public safety specifications for seamless multi-agency collaboration. Extreme rugged and ergonomic design with innovative features developed specifically to enhance personnel safety in extreme environments. Portables can work across multiple digital and analog networks from conventional, to SMARTNET® and SmartZone® to ASTRO® 25 providing true P25 functionality.

The APX 6000 XE offers 1000 Channel Programmability. This radio ships standard as a RUGGED (Delta T submersion-2 meters/2 hours) portable and with UL certification. Also includes Front Color Display: 4 lines of text, 2 lines of icon, Top Display: 1 line of test, 1 line icons, 0 menu lines, Noise Cancellation Software, Dual Microphone, Intelligent Lighting, 3 Programmable Side buttons, 16 Position Mode Rotary Select Switch, ADP Privacy, Oversized Volume, Channel Selector and Emergency Buttons for ease of use when wearing bulky gloves. 1000 channels are included in the following radio packages.



6.8

APX 6000XE PORTABLE RADIO MODEL 3.5 WITH ENCRYPTION

Package Price: \$5,687

Model	Description
H98UCH9PW7BN	APX6000 700/800 MODEL 3.5 PORTABLE
Q806	ADD: ASTRO DIGITAL CAI OPERATION
H38	ADD: SMARTZONE OPERATION
Q361	ADD: P25 TRUNKING SOFTWARE
Q629	ADD: AES ENCRYPTION
Q498	ENH: ASTRO 25 OTAR W/ MULTIKEY
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA02006	ENH: APX6000XE RUGGED RADIO This Option includes the XE (extreme) control top with larger knobs and a display. The carry cases are different for this radio so be sure to choose the right APX6000XE case if you do not want to use the plastic carry holder that ships std with the Model II and model III radios. This option will also pull in a UL battery (PMNN4547) and will include radio UL certification. The QA02006 option includes Delta-T standard. The QA02006 option also includes H499 rugged. This radio is submersible for up to 2 meters for 2 hours when ordered in this configuration with the PMMN4547 battery.
QA09008	ADD: GROUP SERVICES
H885BK	ADD: 3 YEAR ESSENTIAL SERVICE

Note: The APX 6000XE ships with an IMPRES PMNN4547 3100 mAh Li-ION UL which is both UL certified and ruggedized PLUS (submersible for 2 meters/2 hours). Dimensions 3.4"(H) 2.3"(L) 1.8" (D)

If alternate battery is selected the radio will not ship with ruggedized PLUS (submersible for 2 meters/2 hours).

Portable radios do not come with chargers.

6.9

APX 6000XE 3.5 WITH ENCRYPTION AND YELLOW HOUSING

Include all of the options in section above and add option below:

Model	Description	Unit Price
H64	ALT: PUBLIC SAFETY YELLOW	\$20

6.10

APX 6000XE 3.5 WITH ENCRYPTION AND GREEN HOUSING

Include all of the options in section above and add option below:

Model	Description	Unit Price
QA01427	ALT: HIGH IMPACT GREEN	\$20



6.11 APX 6000XE PORTABLE RADIO MODEL 2.5 WITH ENCRYPTION

Package Price: \$5,376

Model	Description
H98UCF9PW6BN	APX6000 700/800 MODEL 2.5 PORTABLE
Q806	ADD: ASTRO DIGITAL CAI OPERATION
H38	ADD: SMARTZONE OPERATION
Q361	ADD: P25 TRUNKING SOFTWARE
Q629	ADD: AES ENCRYPTION
H498	ENH: ASTRO 25 OTAR W/ MULTIKEY
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA02006	ENH: APX6000XE RUGGED RADIO This Option includes the XE (extreme) control top with larger knobs and a display. The carry cases are different for this radio so be sure to choose the right APX6000XE case if you do not want to use the plastic carry holder that ships std with the Model II and model III radios. This option will also pull in a UL battery (PMNN4547) and will include radio UL certification. The QA02006 option includes Delta-T standard. The QA02006 option also includes H499 rugged. This radio is submersible for up to 2 meters for 2 hours when ordered in this configuration with the PMMN4547 battery.
QA09008	ADD: GROUP SERVICES
H885BK	ADD: 3 YEAR ESSENTIAL SERVICE

Note: The APX 6000XE ships with an IMPRES PMNN4547 3100 mAh Li-ION UL which is both UL certified and ruggedized PLUS (submersible for 2 meters/2 hours). Dimensions 3.4"(H) 2.3"(L) 1.8" (D)

If alternate battery is selected the radio will not ship with ruggedized PLUS (submersible for 2 meters/2 hours).

Portable radios do not come with chargers.

6.12 APX 6000XE 2.5 WITH ENCRYPTION AND YELLOW HOUSING

Include all of the options in section above and add option below:

Model	Description	Unit Price
H64	ALT: PUBLIC SAFETY YELLOW	\$20

6.13 APX 6000XE 2.5 WITH ENCRYPTION AND GREEN HOUSING

Include all of the options in section above and add option below:

Model	Description	Unit Price
QA01427	ALT: HIGH IMPACT GREEN	\$20

6.14 APX 6000XE SPARE BATTERY

Model	Description	Unit Price
PMNN4547	IMPRES PMNN4547 3100 MAH LI-ION Dimensions 3.4"(H) 2.3"(L) 1.8" (D)	\$135



6.15

APX 6000 AND APX 6000XE SERVICE OPTIONS

Model	Description	Unit Price
G24	ENH: 3 YRS ESSENTIAL SERVICE Provides 3 years of extended hardware repair coverage beginning after the standard warranty period expires. Repairs will be made only at the designated Motorola repair depot. Local services are not included. Motorola will pay the inbound shipping charges only with use of the Motorola designated delivery service. Motorola will pay for outbound shipping via Motorola's normal shipping methods. No discounts are allowed on this option.	Included in Radio Configuration
Q887	ENH: 5 YRS ESSENTIAL SERVICE Provides 5 years of extended hardware repair coverage beginning after the standard warranty period expires. Repairs will be made only at the designated Motorola repair depot. Local services are not included. Motorola will pay the inbound shipping charges only with use of the Motorola designated delivery service. Motorola will pay for outbound shipping via Motorola's normal shipping methods. No discounts are allowed on this option.	\$206
HA00022AC	ADD: 3Y ESSENTIAL ACCIDENTAL DAMAGE Provides for extended hardware repair coverage and chemical, liquid, and other physical damage on your Motorola portable and mobile subscriber radios. Comprehensive coverage starts from the first day the radio is put into use. Repairs will be made only at the designated Motorola repair depot. Local services are not included. Motorola will pay the inbound shipping charges only with use of the Motorola designated delivery service. Motorola will pay for outbound shipping via Motorola's normal shipping methods. No discounts are allowed on this option.	\$284

RADIO PACKAGES NOT LISTED ARE 27.5% OFF LIST AND ACCESSORIES ARE 20% OFF LIST PER SECTION 9 "ADDITIONAL DISCOUNTS" SECTION OF THIS PRICE BOOK. ALL OTHER DISCOUNTS FOR PRODUCTS AND SERVICES ALSO LISTED IN SECTION 9. FOR SPEAKER MICS AND ADDITIONAL ACCESSORIES PLEASE REFER ACCESSORIES CATALOG.

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6.16 APX 8000 RADIO DESCRIPTION



Figure 6-3: APX 8000

6.17 APX 8000 PORTABLE RADIOS DESCRIPTION

The APX 8000 is redefining mission critical communications by delivering an ultra-durable radio that includes unlimited interoperability, GPS, Mission Critical Bluetooth, Adaptive Audio, and secure WiFi connectivity. With a 4-in-1 radio, you now have the ability to stay connected and expand voice and data communications across multiple agencies with one device. Improve response time by instantly operating on digital or analog networks, in 7/800, VHF, UHF Range 1 and 2 bands at any given time.

6.18 APX 8000 FEATURES

The APX 8000 includes Top Display, Noise Cancellation Software, Dual Microphone, Intelligent Lighting, 3 Programmable Side buttons, 16 Position Mode Rotary Select Switch, ADP Privacy, Oversized Volume, Channel Selector and Emergency Buttons for ease of use when wearing bulky gloves. 3000 channels are included in the following radio package.

RADIO PACKAGES NOT LISTED ARE 27.5% OFF LIST AND ACCESSORIES ARE 20% OFF LIST PER SECTION 9 "ADDITIONAL DISCOUNTS" SECTION OF THIS PRICE BOOK. ALL OTHER DISCOUNTS FOR PRODUCTS AND SERVICES ALSO LISTED IN SECTION 9.



6.19 APX 8000 MODEL 3.5 ALL BAND PORTABLE WITH ENCRYPTION

Package Price: \$7,270

Model	Description
H91TGD9PW7 N	APX 8000 MODEL 3.5 ALL BAND PORTABLE MODEL 3.5
Q806	ADD: ASTRO DIGITAL CAI OPERATION
H38	ADD: SMARTZONE OPERATION
Q361	ADD: P25 TRUNKING SOFTWARE
Q629	ADD: AES ENCRYPTION
Q498	ENH: ASTRO 25 OTAR W/ MULTIKEY
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA09008	ADD: GROUP SERVICES
QA05595	ALT: BATT IMPRES LI-ION UL 4850 MAH (PMNN4505) 5.0"(H)2.0"(L)1.5"(D)
Q58	ADD: 3 YEAR ESSENTIAL SERVICE

Note: For smaller sized battery with less capacity please order #QA07571 3400 mAh IMPRES 3.38"(H) 2.25"(L) 1.8" 1.63"(D) and deduct \$22.40 from package price.

Model 2.5 Also Available-Contact Motorola Account Manager for pricing.

Portable radios do not come with chargers.

6.20 APX 8000 MODEL 3.5 ALL BAND PORTABLE-NO ENCRYPTION

Package Price: \$6,552

Model	Description
The following selection is mandatory	
H91TGD9PW7 N	APX8000 MODEL 3.5 DIGITAL PORTABLE
Q806	ADD: ASTRO DIGITAL CAI OPERATION
H38	ADD: SMARTZONE OPERATION
Q361	ADD: P25 TRUNKING SOFTWARE
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA09008	ADD: GROUP SERVICES
QA05595	ALT: BATT IMPRES LI-ION UL 4850 MAH (PMNN4505) 5.0"(H)2.0"(L)1.5"(D)
QA05751AA	NO ENCRYPTION, CLEAR RADIO (NO ADP)
Q58	ADD: 3 YEAR ESSENTIAL SERVICE

Note: For smaller sized battery with less capacity please order #QA07571 3400 mAh IMPRES 3.38"(H) 2.25"(L) 1.8" 1.63"(D) and deduct \$22.40 from package price.

Model 2.5 Also Available- Contact Motorola Account Manager for Pricing

Portable radios do not come with chargers.



6.21 APX 8000 3.5 ADDITIONAL OPTIONS

Include all of the options from desired configuration on previous page and add option/s below:

Model	Description	Unit Price
Q52	ADD: FRONT PANEL PROGRAMMING (FPP)	\$109
QA04526	ADD: RFID KNOB ADD-RFP KNOB APX6000	\$18

6.22 APX 8000 3.5 DELETE FREQUENCY BAND (OPTIONAL)

Include all of the options from desired configuration on previous page and add option/s below (Can only delete two):

Model	Description	Unit Price
QA05507	DEL: DELETE 7/800 MHZ BAND	-\$580
QA05508	DEL: DELETE VHF BAND	-\$580
QA05509	DEL: DELETE UHF BAND (DELETES BOTH UHF BANDS)	-\$580

6.23 APX 8000 SPARE BATTERIES

Model	Description	Unit Price
PMMN4504	BATT IMPRES LI-ON UL 3400 MAH 3.38"(H) 2.25"(L) 1.8" 1.63"(D)	\$140
PMMN4505	BATT IMPRES LI-ION UL 4850 MAH (QA05595) 5.0"(H)2.0"(L)1.5"(D)	\$160

FOR SPEAKER MICS AND ADDITIONAL ACCESSORIES PLEASE REFER TO ACCESSORIES CATALOG.ACCESSORIES NOT LISTED ARE 20% OFF LIST PRICE.
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6.24 APX 8000XE RUGGEDIZED RADIO DESCRIPTION



Figure 6-4: APX 8000XE with Yellow Housing

6.25 APX 8000XE PORTABLE RADIOS DESCRIPTION

The APX 8000XE is redefining mission critical communications by delivering an ultra-durable radio that combines unlimited interoperability, loud audio, and secure WiFi connectivity. With a 4-in-1 radio, you now have the ability to stay connected and expand voice and data communications across multiple agencies with one device. Improve response time by instantly operating on digital or analog networks, in 7/800, VHF, UHF Range 1 and 2 bands at any given time.

6.26 APX 8000XE FEATURES

The APX 8000XE ships standard as a RUGGED (Delta T submersion-2 meters/2 hours) portable and with UL certification. Also includes Top Display: 1 line of test, 1 line icons, 0 menu lines, Noise Cancellation Software, Dual Microphone, Intelligent Lighting, 3 Programmable Side buttons, 16 Position Mode Rotary Select Switch, ADP Privacy, Oversized Volume, Channel Selector and Emergency Buttons for ease of use when wearing bulky gloves. 3000 channels are included in the following radio package.

RADIO PACKAGES NOT LISTED ARE 27.5% OFF LIST AND ACCESSORIES ARE 20% OFF LIST PER SECTION 9 "ADDITIONAL DISCOUNTS" SECTION OF THIS PRICE BOOK. ALL OTHER DISCOUNTS FOR PRODUCTS AND SERVICES ALSO LISTED IN SECTION 9.

6.27

APX 8000XE MODEL 3.5 RUGGEDIZED ALL BAND PORTABLE WITH ENCRYPTION**Package Price: \$7,853**

Model	Description
The following selection is mandatory	
H91TGD9PW7 N	APX8000XE DIGITAL PORTABLE
QA02006	ENH: APX8000XE RUGGED RADIO
Q806	ADD: ASTRO DIGITAL CAI OPERATION
H38	ADD: SMARTZONE OPERATION
Q361	ADD: P25 TRUNKING SOFTWARE
Q629	ADD: AES ENCRYPTION
Q498	ENH: ASTRO 25 OTAR W/ MULTIKEY
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA09008	ADD: GROUP SERVICES
Q58	ADD: 3 YEAR ESSENTIAL SERVICE

Note: The APX 8000XE ships with an IMPRES 3400 mAh Li-ION UL battery (PMNN4504) which is both UL certified and ruggedized PLUS (submersible for 2 meters/2 hours). Dimensions 3.38"(H)2.25"(L)1.63"(W) Model 2.5 Also Available-Contact Motorola Account Manager for pricing.

**Portable radios do not come with chargers.
The antenna length for this radio is 8.66"**

6.28

APX 8000XE MODEL 3.5 RUGGEDIZED DUAL BAND PORTABLE-NO ENCRYPTION**Package Price: \$6,972**

Model	Description
H91TGD9PW7 N	APX8000XE DIGITAL PORTABLE
QA02006	ENH: APX8000XE RUGGED RADIO
Q806	ADD: ASTRO DIGITAL CAI OPERATION
H38	ADD: SMARTZONE OPERATION
Q361	ADD: P25 TRUNKING SOFTWARE
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA09008	ADD: GROUP SERVICES
QA05751AA	NO ENCRYPTION, CLEAR RADIO (NO ADP)
Q58	ADD: 3 YEAR ESSENTIAL SERVICE

Note: The APX 8000XE ships with an IMPRES 3400 mAh Li-ION UL battery (PMNN4504) which is both UL certified and ruggedized PLUS (submersible for 2 meters/2 hours). Dimensions 3.38"(H)2.25"(L)1.63"(W) Model 2.5 Also Available-Contact Motorola Account Manager for pricing.

**Portable radios do not come with chargers.
The antenna length for this radio is 8.66"**



6.29 APX 8000XE 3.5 ADDITIONAL OPTIONS

Include all of the options in section on previous page and add option below:

Model	Description	Unit Price
Q52	ADD: FRONT PANEL PROGRAMMING (FPP)	\$108
QA04526	ADD: RFID KNOB	\$18

6.30 APX 8000XE 3.5 DELETE FREQUENCY BAND (OPTIONAL)

Include all of the options in section on previous page and add option below (Can only delete two):

Model	Description	Unit Price
QA05507	DEL: DELETE 7/800 MHZ BAND	-\$580
QA05508	DEL: DELETE VHF BAND	-\$580
QA05509	DEL: DELETE UHF BAND (DELETES BOTH UHF BANDS)	-\$580

6.31 APX 8000XE YELLOW HOUSING (OPTIONAL)

Include all of the options from APX8000XE configuration and add option below:

Model	Description	Unit Price
H64	ALT: PUBLIC SAFETY YELLOW	\$20

6.32 APX 8000XE 2.5 GREEN HOUSING (OPTIONAL)

Include all of the options from APX8000XE configuration and add option below:

Model	Description	Unit Price
QA01427	ALT: HIGH IMPACT GREEN	\$20

6.33 APX 8000XE SPARE BATTERY

Model	Description	Unit Price
PMNN4504	BATT IMPRES LI-ON UL 3400 MAH 3.38"(H) 2.25"(L) 1.8" 1.63"(D)	\$140

6.34

CHARGERS FOR APX 6000, APX 6000XE, APX 8000 AND APX 800XE

Model	Description	Unit Price
NNTN8844A	IMPRES 6 Unit Charger with Display Automatically reconditions IMPRES batteries based on actual usage, keeping them in peak condition.	\$1,000
NNTN8860A	IMPRES Single Unit Charger- Automatically reconditions IMPRES batteries based on actual usage, keeping them in peak condition	\$90
NNTN7624C	IMPRES Vehicular Charger (Full Kit)-Hard Wired Installation The APX IMPRES vehicular charger has full IMPRES charger to battery communication capability. This ensures continuity of IMPRES battery charge data logging in a vehicular environment, so the IMPRES battery will receive adaptive, automatic reconditioning and will qualify for the 6-month capacity warranty extension. NOTE: The IMPRES compatible vehicular charger will not recondition IMPRES batteries while in a vehicle, but it will provide an indication when reconditioning is required in an IMPRES desktop charger.	\$312
RLN6434A	APX Travel Charger- Cigarette Lighter Adaptor Its small compact design allows the radio to be used while rapid charging in the charger base. Unit includes a voltage regulated vehicular charger adapter, custom charger base, mounting bracket and coil cord.	\$88

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6.35 APX 4000 DIGITAL 700/800 MHZ PORTABLE RADIOS



Figure 6-5: APX 4000 Model 3

6.36 APX 4000 PORTABLE RADIOS DESCRIPTION

With its easy-to-use interface, color display, intelligent lighting and radio profiles, you get all the power of APX in a compact radio. And its IP67 and MIL-STD certified to withstand dust, heat, shock, drops and water immersion, so you can count on it wherever you need it.

RADIO PACKAGES NOT LISTED ARE 27.5% OFF LIST AND ACCESSORIES ARE 20% OFF LIST PER SECTION 9 "ADDITIONAL DISCOUNTS" SECTION OF THIS PRICE BOOK. ALL OTHER DISCOUNTS FOR PRODUCTS AND SERVICES ALSO LISTED IN SECTION 9. FOR SPEAKER MICS AND ADDITIONAL ACCESSORIES PLEASE REFER ACCESSORIES CATALOG.

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6.37 APX 4000 PORTABLE RADIO MODEL 3 WITH ENCRYPTION

Package Price: \$4,094

Model/Option	Description
H51UCH9PW7 N	APX 4000 7/800 MHZ MODEL 3 PORTABLE
QA02756	ENH: 3600 OR 9600 TRUNKING BAUD SIN
Q629	ADD: AES ENCRYPTION
Q498	ENH: ASTRO 25 OTAR W/ MULTIKEY
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA00582	ALT: IMPRES LI-ION 2500MAH UL (NNTN8560A)
QA09008	ADD: GROUP SERVICES
H885BK	ADD: 3 YEAR ESSENTIAL SERVICE

6.38 APX 4000 PORTABLE RADIO MODEL 3 - NO ENCRYPTION

Package Price: \$3,213

Model/Option	Description
H51UCH9PW7 N	APX 4000 7/800 MHZ MODEL 3 PORTABLE
QA02756	ENH: 3600 OR 9600 TRUNKING BAUD SIN
QA00582	ALT: IMPRES LI-ION 2500MAH UL (NNTN8560A)
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA09008	ADD: GROUP SERVICES
QA05751AA	NO ENCRYPTION, CLEAR RADIO (NO ADP)
H885BK	ADD: 3 YEAR ESSENTIAL SERVICE

6.39 APX 4000 PORTABLE RADIO MODEL 2 WITH ENCRYPTION

Package Price: \$3,783

Model/Option	Description
H51UCF9PW6 N	APX 4000 7/800 MHZ MODEL 2 PORTABLE
QA02756	ENH: 3600 OR 9600 TRUNKING BAUD SIN
Q629	ADD: AES ENCRYPTION
Q498	ENH: ASTRO 25 OTAR W/ MULTIKEY
QA00582	ALT: IMPRES LI-ION 2500MAH UL (NNTN8560A)
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA09008	ADD: GROUP SERVICES
H885BK	ADD: 3 YEAR ESSENTIAL SERVICE



6.40 APX 4000 PORTABLE RADIO MODEL 2 - NO ENCRYPTION

Package Price: \$2,902

Model/Option	Description
H51UCF9PW6 N	APX 4000 7/800 MHZ MODEL 2 PORTABLE
QA02756	ENH: 3600 OR 9600 TRUNKING BAUD SIN
G996	ADD: PROGRAMMING OVER P25 (OTAP)
QA00582	ALT: IMPRES LI-ION 2500MAH UL (NNTN8560A)
QA09008	ADD: GROUP SERVICES
QA05751AA	NO ENCRYPTION, CLEAR RADIO (NO ADP)
H885BK	ADD: 3 YEAR ESSENTIAL SERVICE

6.41 APX 4000 ACCESSORIES

6.42 SPARE BATTERIES

Model	Description	Unit Price
NNTN8560A	ALT: IMPRES LI-ION 2500MAH UL (QA00582)	\$112

6.43 CHARGERS

Model	Description	Unit Price
PMPN4174A	APX4000 SINGLE UNIT CHARGER	\$55
PMPN4284A	SIX BANK CHARGER	\$474
NNTN8525	APX TRAVEL CHARGER (CIGARETTE LIGHTER ADAPTER)	\$68
NNTN7616D	IMPRES VEHICULAR CHARGER (FULL KIT-HARD WIRED)	\$303

Portable radios do not come with chargers.

FOR SPEAKER MICS AND ADDITIONAL ACCESSORIES PLEASE REFER ACCESSORIES CATALOG.ACCESSORIES NOT LISTED ARE 20% OFF LIST PRICE.

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EXHIBIT A: APX8500 CONTROL STATIONS AND CONSOLETTES



Figure 7-1: APX 8500 Consolette with Full Front Panel

7.1 APX 8500 DESCRIPTION

The APX 8500 meets P25 public safety specifications for multi-agency collaboration by offering the option to operate in separate all band configurations. APX 8500 can work across multiple digital and analog networks from conventional and SmartZone® to ASTRO® 25 providing true P25 Functionality. When multiband operation is needed, the APX 8500 is capable of being programmed with any two frequency bands. Only one band can be utilized at time.

Enhanced Frequency Spectrum Utilization

The APX 8500 is designed to offer multiple frequency band solutions for perfect system optimization in congested urban areas or wider country regions. Motorola currently offers the 700/800 MHz all band (764-870MHz), 10-35 watt variable power, VHF (136-174 MHz), UHF Range 1 (380-470 MHz) and UHF Range 2 (450-520 MHz).

7.2 APX 8500 CONSOLETTE DESCRIPTION

The APX 8500 Consolette is the ideal complement to your dispatch console. It's a mid-power RF control station for the ASTRO 25 System that can be used as an emergency backup station when your infrastructure is off-line or for wireless access to different system types for increased interoperability.

7.3

CONSOLETTES FEATURES

The APX8500 Consolette has up to 2000 channels, Optional Multi-Band Operation, Embedded Digital Signal, Intelligent Priority Scan, Unified Call List, Instant Recall, Tactical Inhibit, Intelligent Lighting, Integrated Encryption Hardware and Tone Remote Control.

RADIO PACKAGES NOT LISTED ARE 27.5% OFF LIST AND ACCESSORIES ARE 20% OFF LIST PER SECTION 9 "ADDITIONAL DISCOUNTS" SECTION OF THIS PRICE BOOK. ALL OTHER DISCOUNTS FOR PRODUCTS AND SERVICES ALSO LISTED IN SECTION 9. FOR SPEAKER MICS AND ADDITIONAL ACCESSORIES PLEASE REFER ACCESSORIES CATALOG.

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7.4

APX 8500 SINGLE BAND CONSOLETTTE 700/800MHZ WITH ENCRYPTION AND FULL FRONT PANEL (AC POWER CORD)

Package Price: \$7,645

Model	Description
L37TSS9PW1AN	APX ALL BAND CONSOLETTTE
G806	ENH: SOFTWARE ASTRO DIGITAL CAI OPERATION
G843	ADD: AES ENCRYPTION
G51	ENH: SMARTZONE OPERATION APX
G361	ADD: P25 TRUNKING SOFTWARE
W382	ADD: CONTROL STATION DESK GCAI MIC
G996	ADD: PROGRAMMING OVER P25 (OTAP)
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
L999	ADD: FULL FP W/05/KEYPAD/CLOCK/VU
G78	ADD: 3 YEAR ESSENTIAL SERVICE
CA01598	AC POWER CORD
QA09008	ADD: GROUP SERVICES
GA05508	DEL: DELETE VHF BAND
GA05509	DEL:DELETE UHF BAND

Note: For DC power cord add \$40.15 (ADD:DC Line Cord/Part CA01942).

7.5

APX 8500 SINGLE BAND CONSOLETTTE 700/800 MHZ FULL FRONT PANEL- NO ENCRYPTION (AC POWER CORD)

Package Price: \$7,344

Model	Description
L37TSS9PW1AN	APX ALL BAND CONSOLETTTE
G806	ENH: SOFTWARE ASTRO DIGITAL CAI OPERATION
G51	ENH: SMARTZONE OPERATION APX
G361	ADD: P25 TRUNKING SOFTWARE
W382	ADD: CONTROL STATION DESK GCAI MIC
G996	ADD: PROGRAMMING OVER P25 (OTAP)
L999	ADD: FULL FP W/05/KEYPAD/CLOCK/VU
G78	ADD: 3 YEAR ESSENTIAL SERVICE
QA09008	ADD: GROUP SERVICES
CA01598	AC POWER CORD
QA05751AA	NO ENCRYPTION, CLEAR RADIO (NO ADP)
GA05508	DEL: DELETE VHF BAND
GA05509	DEL:DELETE UHF BAND

Note: For DC power cord add \$40.15 (ADD:DC Line Cord/Part CA01942)

7.6

APX 6500 ENHANCED 700/800 MHZ CONTROL STATION WITH ENCRYPTION (SINGLE BAND ONLY)**Package Price: \$5,546**

Model	Description
M25URS9PW1BN	APX6500 ENHANCED 700/800 MHZ MID POWER MOBILE 10-35 WATT
G806	ENH: ASTRO DIGITAL CAI OP APX
G51	ENH: SMARTZONE OPERATION APX6500
G361	ADD: P25 TRUNKING SOFTWARE
GA00805	ADD: APX 07 CONTROL HEAD
G444	ADD: CONTROL HEAD SOFTWARE
G843	ADD: AES ENCRYPTION
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
G996	ADD: PROGRAMMING OVER P25 (OTAP)
G66	ADD: DASH MOUNT MID POWER
W665	ADD: CONTROL STATION OPERATION
G91	ADD: CONTROL STATION POWER SUPPLY
G142	NO SPEAKER NEEDED
W382	ADD: CONTROL STATION DESK GCAI MIC
QA09008	ADD: GROUP SERVICES
G89	ADD: NO RF ANTENNA NEEDED
G78	ADD: 3 YEAR ESSENTIAL SERVICE

7.7

APX 8500 MOBILE ALL BAND CONTROL STATION RADIO WITH ENCRYPTION**Package Price: \$6,994**

Model	Description
M37TSS9PW1 N	APX8500 ALL BAND MP MOBILE
G51	ADD: SMARTZONE OPERATION
G806	ADD: ASTRO DIGITAL CAI OPERATION
G361	ADD: P25 TRUNKING SOFTWARE
GA00805	ADD: APX 07 CONTROL HEAD
G444	ADD: CONTROL HEAD SOFTWARE
G843	ADD: AES ENCRYPTION
G66	ADD: DASH MOUNT
W382	ADD: CONTROL STATION DESK GCAI MIC
G89	ADD:NO RF ANTENNA NEEDED
G142	ADD: NO SPEAKER NEEDED
G996	ENH: OVER THE AIR PROVISIONING
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
GA00235	ADD: NO GPS ANTENNA NEEDED
G91	ADD: CNTRL STATION PWR SUPPLY
W665	ADD: CONTROL STATION OPERATION
GA01517	DEL: NO J600 ADAPTER CABLE NEEDED
QA09008	ADD: GROUP SERVICES
G78	ADD: 3 YEAR ESSENTIAL SERVICE



7.8

APX 8500 CONTROL STATION DELETE FREQUENCY BAND (OPTIONAL)

Include all of the options from APX8500 Control Station configuration and add desired option/s below (Can only select two):

Model	Description	Unit Price
QA05507	DEL: DELETE 7/800 MHZ BAND	-(\$580)
QA05508	DEL: DELETE VHF BAND	-(\$580)
QA05509	DEL: DELETE UHF BAND (DELETES BOTH UHF BANDS)	-(\$580)

7.9 APX 4500 SINGLE BAND CONTROL STATION RADIO-WITH ENCRYPTION

Package Price: \$4,363

Model	Description
M22URS9PW1 N	APX4500 7/800
QA02756	ADD: 3600 OR 9600 TRUNKING BAUD SINGLE SYSTEM
G843	ADD: AES ENCRYPTION
GA00804	ADD: APX O2 CONTROL HEAD
G444	ADD: APX CONTROL HEAD SOFTWARE
G66	ADD: DASH MOUNT
W382	CONTROL STATION DESK GCAI MIC
G996	ADD: PROGRAMMING OVER P25 (OTAP)
G298	ENH: ASTRO 25 OTAR W/ MULTIKEY
G142	ADD: NO SPEAKER NEEDED
G91	ADD: CONTROL STATION POWER SUPPLY
W665	ADD: CONTROL STATION OPERATION
GA09008	ADD: GROUP SERVICES
G24	ADD: 3 YEAR ESSENTIAL SERVICE

7.10 APX 4500 SINGLE BAND CONTROL STATION RADIO-NO ENCRYPTION

Package Price: \$3,482

Model	Description
M22URS9PW1 N	APX4500 7/800
QA02756	ADD: 3600 OR 9600 TRUNKING BAUD SINGLE SYSTEM
GA00804	ADD: APX O2 CONTROL HEAD
G444	ADD: APX CONTROL HEAD SOFTWARE
G66	ADD: DASH MOUNT
G335	ADD: ANT 1/4 WAVE 762-870MHZ
W382	CONTROL STATION DESK GCAI MIC
G996	ADD: PROGRAMMING OVER P25 (OTAP)
G142	ADD: NO SPEAKER NEEDED
G91	ADD: CONTROL STATION POWER SUPPLY
W665	ADD: CONTROL STATION OPERATION
GA09008	GROUP SERVICES
QA05751AA	NO ENCRYPTION, CLEAR RADIO (NO ADP)
G24	ADD: 3 YEAR ESSENTIAL SERVICE

7.11 APX DESKTOP MOBILE TRAY (COMPATIBLE WITH APX4500, APX6500 AND APX8500)

Model	Description	Unit Price
HLN6042A	Motorola HLN6042A desktop tray with speaker allows users to conveniently convert an APX mobile into a basic base station.	\$66



8.1 EXHIBIT A: MCD5000 DESKSET AND RADIO GATEWAY UNIT (RGU)



The MCD 5000 Deskset System is the Motorola Solution's next generation radio dispatch deskset platform that utilizes VoIP technology. The MCD 5000 Deskset can be deployed on existing customer's IP network or on a stand-alone IP network. The MCD 5000 Deskset is part of the MCD 5000 Deskset System that provides radio dispatch capability when connected to a two-way radio device. MCD 5000 Desksets can be placed anywhere on the IP network. Each MCD 5000 Deskset connects to a single radio device at a time. The MCD 5000 Deskset may connect directly to a radio or connected to a selected radio over IP network via the MCD 5000 Radio Gateway Unit (RGU). MCD5000 is compatible with APX7500 and APX8500 Consolettes.

8.2 MCD 5000 DESKSET

Model	Description	Unit Price
F2380A	MCD5000 DESKSET	\$1,290
FHN7469A	MCD5000 POWER CORD	\$86

8.3 RADIO GATEWAY UNIT (RGU)

Model	Description	Unit Price
F7879B	RADIO GATEWAY UNIT (RGU)	\$1,290
FHN7469A	RGU POWER CORD	\$86

8.4 MCD 5000 DESKSET AND RADIO GATEWAY UNIT (RGU)

Model	Description	Unit Price
FHN7394	MCD 5000 DESKSET WALL MOUNT KIT-Provides one wall mount base kit to be used for mounting a MCD 5000 Deskset (F2380) to a wall.	\$21
FTN7490	MCD 5000 DESKSET RGU RACK MOUNT PANEL PLUS SCREWS	\$172

RADIO PACKAGES NOT LISTED ARE 27.5% OFF LIST AND ACCESSORIES ARE 20% OFF LIST PER SECTION 9 "ADDITIONAL DISCOUNTS" SECTION OF THIS PRICE BOOK. ALL OTHER DISCOUNTS FOR PRODUCTS AND SERVICES ALSO LISTED IN SECTION 9. FOR SPEAKER MICS AND ADDITIONAL ACCESSORIES PLEASE REFER ACCESSORIES CATALOG.

https://shop.motorolasolutions.com/?_ga=2.209673489.265811969.1588006669-1558378512.1587576280



SECTION 9

EXHIBIT A: DISPATCH CENTER EQUIPMENT

9.1 ADDITIONAL FIXED SYSTEM AND DISPATCH CENTER EQUIPMENT

Please contact your Motorola Account Manager prior to purchasing this equipment. Engineering and technical considerations are required. Discount listed in section 9.



Figure 9-1: Dispatch Center Equipment

10.1 EXHIBIT A: ADDITIONAL DISCOUNTS

Blanket discount applies to the section as stated, with specific Exceptions as stated.

Pricing shall be in accordance with Motorola Solutions Systems PCAT Electronic Catalog.

Discounts only apply to specific main line and options.

All subscription based products and services will be subject to Motorola's Subscriptions Services Agreement."

Equipment and Services	Discount %
APX Next Hardware	10%
APX Series Radio Packages	27.5%
APX Radio Accessories if not Ordered in a Radio Package	20%
Automatic License Plate Recognition (ALPR)	15%
Broadband	0%
CAD/RMS/Jail/Mobile Applications	5%
Command Central Suite	5%
Comparators	14%
Consoles	14%
Conversion Kits (Subscribers)	20%
Crime Analysis and Visualization	5%
Critical Connect	0%
Data Products	5%
Desksets	14%
Digital Evidence Mangement (DEMS)	5%
Dispatch Furniture	10%
NG911- Including but not limited to: -Vesta -Emergency Call Works	5%
Encoders	4%
Enhanced Statistical Awareness Tools	10%
Fixed Data Products	14%
Fixed Stations- Including, but not limited to: ▪ Repeaters / Receivers	19%
Fixed Station Accessories	4%
Fixed Station Antenna Systems	4%

Equipment and Services	Discount %
Fixed Station Controls- Including, but not limited to: -MCC7500 -MCC7500e -Avtec -Monitoring and Control Stations -911 -Logging Recorders -AXS Console -Other Consoles/Equipment	14%
Hardware and Software Not Listed	5%
LEX Devices	15%
Mobile Accessories	20%
Mobile Radios/Stations Not Listed	10%
MSB Building	4%
Networking Products	14%
Portable Accessories	20%
Portable Radios Not Listed	10%
Predictive Analytics	10%
Receivers	19%
Trunked Systems	14%
Social Media Analytics	5%
Software Solutions	5%
Subscriber FLASHport Software Upgrade	27.5%
Subscription Services	0%
Motorola Parts and Accessories (if not in a radio package)	20%
Non-Motorola Mfg. Items/Drop Ship	4%
Motorola Radios Not Listed	20%
Private LTE	5%
Video Solutions-Including but not limited to: -Avigilon -Vigilant -WatchGuard -Fixed Video -In Car Video	0%
Virtual Collaboration Tools	0%
SERVICES AND TRAINING	
Depot Repair- Current flat rate fees apply for time and material. Discounts available if Depot Service Contract signed with Motorola.	0%
Engineering or Project Management. Contact Motorola Account Manager	\$0% Price Will Vary
Other Services-Including but not limited to: Maintenance and Support and SUA. Will vary according to project scope. Contact Motorola Account Manager for quote.	0% Price Will Vary



10.2 NOTES

1. For equipment that is not listed out individually or in packages please see Section 9 “Additional Discounts” section of the price book for discount level.
2. The base part number will always stay the same. However, occasionally a suffix on a part number will be changed.
3. Existing suffixes on a part numbers are subject change. However, the base part number will always stay the same.
4. Product description may vary slightly depending on which source information on a particular product is pulled from.
5. No discounts available on flash upgrades; however, a discount is available on software options, if purchased with radios.
6. Service pricing will vary depending on project scope and resources needed. Please contact Motorola Sales Representative for services quotes.
7. If a part is discontinued it may be replaced with a substituted part that has the same functionality and quality.

TERMS AND CONDITIONS

11.1 PRICE BOOK AGREEMENT

County of Orange and Motorola, Inc. Price Book Agreement

Motorola Solutions, Inc., formerly Motorola, Inc., and the County of Orange propose the following changes to Amendment No. 3 to Agreement Number S0000015.95 (Amendment) as the basis for a new Agreement between the Parties for purchasing Equipment, software and related services. This new County Price Book Agreement is number 060-15011560.

Recitals

1. The County of Orange ("County") desires to purchase from Motorola Solutions, Inc. ("Motorola") various products, equipment, software from Motorola's Price Book, and related services.
2. The County contract Number S0000015.95 with Motorola expired on May 20, 2010, and was replaced with County Price Book Agreement MA-060-10012594. County Price Book Agreement MA-060-15011560 expires on May 21, 2020, and this Agreement is the new contract replacing County Price Book Agreement MA-060-10012594 by which the County may purchase products, equipment, software and related services from Motorola. MA-060-15011560 Replaced with Contract # MA-060-21010004 which Expires on May 20, 2025.
3. Motorola has a published price book containing the products, equipment, software, and related services, and is offering it to the County.

Terms

County and Motorola agree as follows:

Section 1 Exhibits

The Exhibits listed below are incorporated into and made a part of this Agreement. In interpreting this Agreement and resolving any ambiguities, the main body of this Agreement will take precedence over the Exhibits.

- Exhibit A Orange County Price Book (See Section 1 through 9 above.)
- Exhibit B Motorola Software License Agreement
- Exhibit C County Participants

Exhibit A may be amended from time to time to add, delete, or change offered products as new products become available or existing products become obsolete.

Section 2 Definitions

“Contract Participants” are more particularly described in Exhibit C.

“Customer” means the County and any of its Contract Participants.

“Effective Date” means that date upon which the last party to sign this Agreement has executed this Agreement.

“Equipment” means the hardware and components listed in the Orange County Price Book.

“Infringement Claim” means a third-party claim alleging that the Equipment manufactured by Motorola or the Motorola Software infringes upon the third-party’s United States patent or copyright

“Motorola Software” means Software that Motorola owns.

“Non-Motorola Software” means Software that a party other than Motorola owns.

“Party” means Customer or Motorola, as the context indicates; “Parties” means both of them.

“Price Book” means the Orange County Price Book dated May 21, 2020 (Exhibit A).

“Proprietary Rights” means the patents, patent applications, inventions, copyrights, trade secrets, trade marks, trade names, mask works, know-how, and other intellectual property rights in and to the Equipment and Software, including those created or produced by Motorola under this Agreement and any corrections, bug fixes, enhancements, updates or modifications to or derivative works from the Software made by Motorola or another party.

“Software” means the Motorola and Non-Motorola Software in object code format that is furnished with the Equipment.

“Software License Agreement” means the agreement in Exhibit B.

Section 3 Terms of the Agreement

3.1 Terms of Purchase. This Agreement shall apply only to purchases of products, equipment, software, and related services that occur on or after the Effective Date. Also, this Agreement may be used for system transactions, provided that necessary additional documents are mutually agreed; these additional documents may include a system description, statement of work, equipment list, acceptance test plan, project schedule, payment milestone schedule, and supplemental terms and conditions that apply to that system transaction but which do not generally modify this Agreement. Although pricing for system transactions will be based off of the Orange County Price Book, nothing in this Agreement precludes Motorola from offering additional discounts such as a system discount.

3.2 Controlling Terms and Conditions. This Agreement, including all Exhibits, constitutes the entire agreement of the Parties regarding the subject matter of



the Agreement and supersedes all previous agreements, proposals, and understandings, whether written or oral, relating to this subject matter. This Agreement may be amended or modified only by a written instrument signed by authorized representatives of both Parties. The preprinted terms and conditions found on any Customer purchase order, acknowledgment or other form will not be considered an amendment or modification of this Agreement, even if a representative of each Party signs that document.

- 3.3 Change Orders. Either Party may request changes within the general scope of this Agreement. Neither Party is obligated to perform requested changes unless both Parties execute a written change order.
- 3.4 Term. Unless otherwise terminated in accordance with the provisions of this Agreement or extended by mutual agreement of the Parties, the term of this Agreement will begin on the Effective Date and shall continue until May 20, 2025.
- 3.4.1. Termination for Convenience. Notwithstanding any other provision of this Agreement, the Customer may, at any time, and without any cause, terminate this Agreement in whole or in part, upon not less than seven (7) days' written notice to Motorola. Such termination shall be effected by delivery to Motorola of a notice of termination specifying the effective date of the termination and the extent of the Work (i.e., ordered products and/or services) to be terminated. Motorola shall immediately stop work in accordance with the notice and comply with any other direction as may be specified in the notice or as provided subsequently by the Customer. Customer shall pay Motorola for the Work completed prior to the effective date of the termination, and such payment shall be Motorola's sole remedy under this Agreement. Under no circumstances will Motorola be entitled to anticipatory or unearned profits, consequential damages, or other damages of any sort as a result of a termination or partial termination under this Paragraph.
- 3.5 Maintenance Service. This Agreement does not cover maintenance or support of the Equipment except as provided under the warranty. If Customer wishes to purchase maintenance or support, Motorola will provide a separate maintenance and support proposal upon request.
- 3.6 Non-Motorola Software. Any Non-Motorola Software is licensed to Customer in accordance with the standard license, terms, and restrictions of the copyright owner on the Effective Date unless the copyright owner has granted to Motorola the right to sublicense the Non-Motorola Software pursuant to the Software License Agreement, in which case it applies and the copyright owner will have all of Licensor's rights and protections under the Software License Agreement. Motorola makes no representations or warranties of any kind regarding Non-Motorola Software. Non-Motorola Software may include Open Source Software. All Open Source Software is licensed to Customer in accordance with, and Customer agrees to abide by, the provisions of the standard license of the copyright owner and not the Software License Agreement. Upon request by

Customer, Motorola will use commercially reasonable efforts to determine whether any Open Source Software will be provided under this Agreement; and if so, identify the Open Source Software and provide to Customer a copy of the applicable standard license (or specify where that license may be found); and provide to Customer a copy of the Open Source Software source code if it is publicly available without charge (although a distribution fee or a charge for related services may be applicable).

- 3.7 Motorola Software. Any Motorola Software, including subsequent releases, is licensed to Customer solely in accordance with the Software License Agreement. Customer hereby accepts and agrees to abide by all of the terms and restrictions of the Software License Agreement. TO THE EXTENT, IF ANY, THAT THERE IS A SEPARATE LICENSE AGREEMENT PACKAGED WITH, OR PROVIDED ELECTRONICALLY WITH, A PARTICULAR PRODUCT THAT BECOMES EFFECTIVE ON AN ACT OF ACCEPTANCE BY THE END USER, THEN THAT AGREEMENT SUPERCEDES THIS SOFTWARE LICENSE AGREEMENT AS TO THE END USER OF EACH SUCH PRODUCT.
- 3.8 Services. If services are being provided, they will be provided at the location specified in the description of the services. Unless otherwise stated in the description of the services, the hours of service will be 8:30 a.m. to 4:30 p.m., local time, excluding weekends and holidays. Unless otherwise stated in the description of the services, the price for the services exclude any charges or expenses associated with helicopter or other unusual access requirements; if these charges or expenses are reasonably incurred by Motorola in rendering the services and agreed to by Customer prior to incurring such expenses, Customer agrees to reimburse Motorola for those charges and expenses.
- 3.9 Any subscription based services or products purchased will be subject to Contractor's Subscription Services Agreement, a copy of which is available upon request.

Section 4 Payment Requirements

- 4.1 Terms of Payment. Motorola will submit to Customer invoices for Equipment or Software when they are delivered and for related services when they are performed (but no more frequently than monthly). Customer will make payments to Motorola within thirty (30) days after receipt of Motorola's invoice. Customer will make payments when due in the form of a check, cashier's check, or wire transfer drawn on a U.S. financial institution. Payments made by Customer shall not preclude the right of Customer from thereafter disputing any Equipment or service billed under this Agreement and shall not be construed as acceptance of the Products.
- 4.2 Freight, Title and Risk of Loss. All freight charges will be pre-paid by Motorola and added to the invoices. Title and risk of loss to the Equipment will pass to Customer upon delivery to Customer, except that title to Software will not pass to Customer at any time but is licensed. Motorola will pack and ship all Products in accordance with good commercial practices.



- 4.3 Invoicing Instructions. As a condition of payment of any invoice, the Customer must receive an invoice in an acceptable format, including Motorola's Federal I.D. number (36-1115800) and the California seller's permit number (SR SOHA 30-616008), if applicable. In addition, sufficient itemization and/or description, including the serial numbers of any equipment items, must appear on the invoice. Dollar amounts, extensions and totals must be correct. When appropriate, dollar amounts for taxes, freight or any other fees must be adequately described and itemized.

Section 5 Pricing

The pricing of the Equipment, Software, and services is controlled by the Orange County Price Book. The prices in the Orange County Price Book for Equipment and Software are a fixed discount off of the list price for specific categories of Equipment or Software. The applicable list price shall be the list price in effect on the date of the order. However, Motorola will provide Customer with reasonable notice and a 30 day grace period before any price change will take effect. If a new product is added to the Price Book, Motorola reserves the right to establish a fixed discount for the new product. Any discount not meeting the category discount shall be by mutual agreement of the Parties.

Section 6 Acceptance

Acceptance of the Equipment will occur upon delivery to Customer unless the Statement of Work provides for acceptance verification or testing, in which case acceptance of the Equipment will occur upon successful completion of the acceptance verification or testing. Notwithstanding the preceding sentence, Customer's use of any Equipment or Software for their operational purposes will constitute acceptance. Equipment shall not be accepted for purposes of this section if returned by the Customer for Equipment that is not conforming to the order, defective or unsatisfactory.

Section 7 Representations and Warranties

- 7.1 Equipment Warranty. For one (1) year from the date of delivery, Motorola warrants that the Equipment under normal use and service will be free from material defects in materials and workmanship. Motorola shall repair or replace equipment or parts during the warranty period. All parts and labor shall be included by Motorola at no charge. If a piece of equipment fails or operates at less than the manufacturer's designed specifications three times for the same or similar reason, within its warranty period, Motorola will replace the piece of equipment at Customer's request and at Motorola's cost.
- 7.2 Software Warranty. For one (1) year from the date of delivery, Motorola warrants the Motorola Software in accordance with the terms of the Software License Agreement and the provisions of this Section that are applicable to the Motorola Software.

- 7.3 Services Warranty. For 90 days from the date the services were performed, Motorola warrants that the services were performed in a good and workmanlike manner, consistent with industry practices.
- 7.4 Exclusions to Equipment and Software Warranties. These warranties do not apply to: (i) defects or damage resulting from use of the Equipment or Software in other than its normal, customer, and authorized manner; (ii) defects or damage occurring from misuse, accident, liquids, neglect, or acts of God; (iii) defects or damage occurring from testing, maintenance, disassembly, repair, installation, alteration, modification, or adjustment not provided or authorized in writing by Motorola; (iv) breakage of or damage to antennas unless caused by Customer's failure to comply with all applicable industry and OSHA standards; (v) Equipment that has had the serial number removed or made illegible; (vi) batteries (because they carry their own separate limited warranty); (vii) scratches or other cosmetic damage to Equipment surfaces that does not affect operation of the Equipment; and (viii) normal or customary wear and tear.
- 7.4 Warranty Claims. Motorola will, at no additional charge to Customer, repair the defective Equipment or Motorola Software, replace it with the same or equivalent product, or refund the price of the defective Equipment or Motorola Software upon verbal notification by Customer. Motorola will, at no additional charge to Customer, re-perform defectively performed services upon verbal notification by Customer. Such action will be the full extent of Motorola's liability hereunder. If this investigation indicates the warranty claim is not valid, then Motorola may invoice Customer for responding to the claim on a time and materials basis using Motorola's current labor rates. Repaired or replaced product is warranted for the balance of the original applicable Warranty Period. All replaced products or parts will become the property of Motorola.
- 7.5 Parts Availability. Motorola will use best commercially reasonable efforts to provide replacement parts for Motorola manufactured subscriber equipment for five (5) years and for Motorola manufactured fixed infrastructure equipment for seven (7) years from the date at which the product is no longer shipped. Motorola reserves the right to supply either assemblies or piece parts. Concerning non-Motorola manufactured Equipment; if Motorola receives written notice from a third party vendor that it intends to cancel any Equipment it provides, Motorola shall provide Customer written notice prior to the scheduled cancellation to provide Customer the opportunity to purchase replacement parts.
- 7.6 Third Party Warranty. Motorola will pass through to Customer on a non-exclusive basis any assignable third party warranties that exceed the Motorola warranty provided in this Agreement. Motorola will not assume any obligations concerning the pass-through third party warranties.
- 7.7 Original End User is Covered. These express limited warranties are extended by Motorola to the original user purchasing the Equipment or Motorola Software for commercial, industrial, or governmental use only, and are not assignable or transferable.



- 7.8 EQUIPMENT COMPATIBILITY Equipment provided pursuant to this Agreement must operate in a manner compatible with the County's Countywide Coordinated Communications System ("CCCS").
- 7.9 DISCLAIMER OF OTHER WARRANTIES. THESE WARRANTIES ARE THE COMPLETE WARRANTIES FOR THE PRODUCTS, EQUIPMENT, MOTOROLA SOFTWARE, AND SERVICES PROVIDED UNDER THIS AGREEMENT AND ARE GIVEN IN LIEU OF ALL OTHER WARRANTIES. EXCEPT FOR THE FOREGOING EXPRESS WARRANTIES, THE PRODUCTS, EQUIPMENT MOTOROLA SOFTWARE, AND SERVICES ARE PROVIDED "AS IS" AND MOTOROLA DISCLAIMS ALL OTHER WARRANTIES OR CONDITIONS, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. NOTWITHSTANDING THE PRECEDING SENTENCE, MOTOROLA EXPRESSLY WARRANTS THAT ALL PRODUCTS, EQUIPMENT AND SOFTWARE PROVIDED UNDER THIS AGREEMENT IS MERCHANTABLE (WITHIN THE MEANING OF SECTION 2314 OF THE CALIFORNIA COMMERCIAL CODE) AND THAT SUCH PRODUCTS, EQUIPMENT AND SOFTWARE IS SUITABLE AND FIT FOR THE PARTICULAR PURPOSE OF USE AS A REGIONAL RADIO COMMUNICATIONS SYSTEM. MOTOROLA DOES NOT WARRANT THAT LICENSEE'S USE OF THE MOTOROLA SOFTWARE OR PRODUCTS WILL BE UNINTERRUPTED OR ERROR-FREE. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS AGREEMENT.

Section 8 Conflicts of Interest

Motorola shall exercise reasonable care and diligence to prevent any actions or conditions that could result in a conflict of interest of the County or other third parties named in Exhibit C. This obligation shall apply to Motorola's employees, agents, relatives, sub-tier contractors, and third parties associated with the Equipment and Software in this Agreement. Motorola may not make, receive, provide, or offer gifts, entertainment, payments, loans, or other considerations which could be deemed to appear to influence individuals to act contrary to the interest of the County or third parties named in Exhibit C.

Section 9 Delays/Force Majeure

Neither Party will be liable for its non-performance or delayed performance if caused by a Force Majeure. A Party that becomes aware of a Force Majeure that will significantly delay performance will notify the other Party promptly (but in no event later than fifteen (15) days) after it discovers the Force Majeure. If a Force Majeure occurs, the Parties will execute a change order to extend the performance schedule for a time period that is reasonable under the circumstances.

Section 10 Disputes

The Parties will use the following procedure to address any dispute arising under this Agreement (a "Dispute").

- 10.1. **GOVERNING LAW.** This Agreement will be governed by and construed in accordance with the laws of the State of California.
- 10.2. **NEGOTIATION.** Either Party may initiate the Dispute resolution procedures by sending a notice of Dispute ("Notice of Dispute"). The Parties will attempt to resolve the Dispute promptly through good faith negotiations, including timely escalation of the Dispute to executives who have authority to settle the Dispute and who are at a higher level of management than the persons with direct responsibility for the matter and direct communication between the executives. If the Dispute has not been resolved within thirty (30) days from the Notice of Dispute, the Parties will proceed to mediation.
- 10.3. **MEDIATION.** The Parties will choose an independent mediator within thirty (30) days of a notice to mediate from either Party ("Notice of Mediation"). Neither Party may unreasonably withhold consent to the selection of a mediator. If the Parties are unable to agree upon a mediator, either Party may request that American Arbitration Association nominate a mediator. Each Party will bear its own costs of mediation, but the Parties will share the cost of the mediator equally. Each Party will participate in the mediation in good faith and will be represented at the mediation by a business executive with authority to settle the Dispute.
- 10.4. **LITIGATION, VENUE AND JURISDICTION.** If a Dispute remains unresolved for sixty (60) days after receipt of the Notice of Mediation, or the Dispute concerns intellectual property, either Party may then submit the Dispute to a court of competent jurisdiction located in Orange County, California, and the Parties hereto agree to and do hereby submit to the jurisdiction of such court, notwithstanding Code of Civil Procedure Section 394. Furthermore, the Parties specifically agree to waive any and all rights to request that an action be transferred for trial to another county.
- 10.5. **CONFIDENTIALITY.** All communications pursuant to subsections 10.2 and 10.3 will be treated as compromise and settlement negotiations for purposes of applicable rules of evidence and any additional confidentiality protections provided by applicable law. The use of these Dispute resolution procedures will not be construed under the doctrines of laches, waiver or estoppel to affect adversely the rights of either Party.



Section 11 Patent and Copyright Infringement Indemnification

Motorola will defend at its expense any suit brought against Customer to the extent it is based on an Infringement Claim, and Motorola will indemnify and hold harmless Customer for those costs and damages finally awarded against Customer for an Infringement Claim. Motorola's duties to defend, indemnify and hold harmless are conditioned upon: Customer promptly notifying Motorola in writing of the Infringement Claim; Motorola having sole control of the defense of the suit and all negotiations for its settlement or compromise; and Customer providing to Motorola cooperation and, if requested by Motorola, reasonable assistance in the defense of the Infringement Claim.

If an Infringement Claim occurs, or in Motorola's opinion is likely to occur, Motorola may at its option and expense procure for Customer the right to continue using the Equipment or Motorola Software, replace or modify it so that it becomes non-infringing while providing functionally equivalent performance, or grant Customer a credit for the Equipment or Motorola Software as depreciated and accept its return. The depreciation amount will be calculated based upon generally accepted accounting standards for such Equipment and Motorola Software.

Motorola will have no duty to defend, indemnify or hold harmless for any Infringement Claim that is based upon the combination of the Equipment or Motorola Software with any software, apparatus or device not furnished by Motorola; the use of ancillary equipment or software not furnished by Motorola and that is attached to or used in connection with the Equipment or Motorola Software; any Equipment that is not Motorola's design or formula; a modification of the Motorola Software by a party other than Motorola; or the failure by Customer to install an enhancement release to the Motorola Software that is intended to correct the claimed infringement. The foregoing states the entire liability of Motorola with respect to infringement of patents and copyrights by the Equipment, Motorola Software, or any of their parts.

Section 12 Limitation of Liability

Except for personal injury or death, Motorola's and Customer's total liability, whether for breach of contract, warranty, negligence, strict liability in tort, indemnification, or otherwise, will be limited to the direct damages recoverable under law, but not to exceed the price of the Equipment, Software, or services with respect to which losses or damages are claimed.

ALTHOUGH THE PARTIES ACKNOWLEDGE THE POSSIBILITY OF SUCH LOSSES OR DAMAGES, THEY AGREE THAT MOTOROLA AND CUSTOMER WILL NOT BE LIABLE FOR ANY COMMERCIAL LOSS; INCONVENIENCE; LOSS OF USE, TIME, DATA, GOOD WILL, REVENUES, PROFITS OR SAVINGS; OR OTHER SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO OR ARISING FROM THIS AGREEMENT, THE SALE OR USE OF THE EQUIPMENT OR SOFTWARE, OR THE PERFORMANCE OF SERVICES BY MOTOROLA PURSUANT TO THIS AGREEMENT. On no instance shall the limitation of liability impair the County's ability to seek remedy for damages through the Contractor's insurance carrier for the primary limit and coverage up to \$5,000,000. This limitation of liability provision survives the expiration or termination of the Agreement.

Section 13 Proprietary Rights

- 13.1 Proprietary Rights of Equipment and Software. Motorola owns and retains all of its Proprietary Rights in the Equipment and Software. The third party manufacturer of any Equipment and the copyright owner of any Non-Motorola Software own and retain all of their Proprietary Rights in the Equipment and Software. Nothing in this Agreement is intended to restrict the Proprietary Rights of Motorola, any copyright owner of Non-Motorola Software, or any third party manufacturer of Equipment. All intellectual property developed, originated, or prepared by Motorola in connection with providing to Customer the Equipment and Software remain vested exclusively in Motorola, and this Agreement does not grant to Customer any shared development rights of intellectual property.
- 13.2 Software License. Except as explicitly provided in the Software License agreement, nothing in this Agreement will be deemed to grant, either directly or by implication, estoppel, or otherwise, any right, title or interest in Motorola's Proprietary Rights. Concerning both the Motorola Software and Non-Motorola Software, Customer agrees not to modify, disassemble, peel components, decompile, otherwise reverse engineer or attempt to reverse engineer, derive source code or create derivative works from, adapt, translate, merge with other software, reproduce, or export the Software or permit or encourage any third party to do so.

Section 14 General

- 14.1 Taxes. The Agreement Price does not include any amount for federal, state, or local excise, sales, lease, service, rental, use, property, occupation, or other taxes, assessments or duties (other than federal, state, and local taxes based on Motorola's income or net worth), all of which will be paid by Customer except as exempt by law. If Motorola is required to pay or bear the burden of any such taxes, Motorola will send an invoice to Customer and Customer will pay Motorola the amount of such taxes (including any applicable interest and penalties) within thirty (30) days from receipt of the invoice. Customer will be solely responsible for reporting the Equipment for personal property tax purposes.
- 14.2 Assignability. Except as provided herein, neither Party may assign this Agreement or any of its rights or obligations hereunder without the prior written consent of the other Party, which consent will not be unreasonably withheld or delayed. Any attempted assignment, delegation, or transfer without the necessary consent will be void. Notwithstanding the foregoing, Motorola may assign this Agreement to any of its affiliates or its right to receive payment without the prior consent of Customer. In addition, in the event Motorola is involved in a major corporate restructuring (such as a sale, acquisition, establishment of a joint venture, spin-off or otherwise (each a "Separation Event")), Motorola may, without the prior written consent of the other Party and at no additional cost to Motorola, assign this Agreement as part of or following the Separation Event. Motorola shall provide Customer reasonable written notice of a Separation Event.



- 14.3 Waiver. No term or provision of this Agreement shall be deemed waived and no breach excused, unless such waiver of consent shall be in writing and signed by the Party claimed to have waived or consented. Any consent by any Party to, or waiver of, or excuse for any other different or subsequent breach.
- 14.4 Validity. The invalidity in whole or in part of any provision of this Agreement as mutually agreed to by the Parties, or as adjudicated by a court of competent jurisdiction, does not void or affect the validity of any other provision of this Agreement.
- 14.5 Independent Contractors. Nothing contained in this Agreement shall be construed as creating the relationship of employer/employee or principal/agent.
- 14.6 Governing Law. The formation, interpretation, and performance of this Agreement shall be governed by the laws of the State of California, provided that no provision of this Agreement shall be interpreted for or against a Party because that Party or its legal representative drafted such provision, and this Agreement shall be construed as if jointly prepared by the Parties. No lawsuit pertaining to any matter arising under or growing out of this Agreement shall be instituted in any state other than California.
Any legal proceeding with respect to this Agreement shall be filed in the appropriate Court of the State of California in Orange County, California consistent with Section 10.4, above.
- 14.7 Notices. Notices required under this Agreement to be given by one Party to the other must be in writing and either delivered in person or sent to the address shown below by certified mail, return receipt requested and postage prepaid (or by a recognized courier service with an asset tracking system, such as Federal Express, UPS, or DHL), or by email, and shall be effective upon receipt:

Motorola Solutions, Inc.

Attn: Kim Caplan
Sr. Account Manager
6450 Sequence Drive
San Diego, CA 92121
O: 760-630-5199
M: 858-442-3979

Orange County

Attn: Dave Fontneau
Division Director
840 N. Eckhoff St., Suite 104
Orange, CA 92868
O. 714-704-7919

- 14.8 FCC Licenses. Customer will obtain and comply with all Federal Communications Commission ("FCC") licenses and authorizations required for the installation, operation and use of Equipment. Although Motorola might assist Customer in the preparation of its FCC license applications, neither Motorola nor any of its employees is an agent or representative of Customer in FCC or other matters.
- 14.9 Indemnity. Motorola agrees to indemnify, defend, protect, investigate any claims, and to hold harmless the County and third parties named in Exhibit C, their

officers, elected officials, employees and agents from and against any and all claims, demands or liability established resulting from damages or injuries to persons or property which arise from or are related to negligent errors, acts or omissions of Motorola and its agents under this Agreement; Motorola shall not however indemnify, defend, protect and hold harmless the County or third parties named in Exhibit C from claims, demands, or liability arising from the negligence as it relates to the errors, acts or omissions of the County or the third parties named in Exhibit C. Motorola's obligations under this provision shall not affect the right of the Customer to appear and to participate in legal actions against third parties bringing such suits. The Customer may take other action necessary to protect its interests. If Motorola's negligence combines with the negligence of the County or other third parties named in Exhibit C to cause injury, the Parties agree that liability will be apportioned as determined by a court of competent jurisdiction. Neither party shall request a jury apportionment.

- 14.10 Authority to Execute Agreement. Each Party represents to the other that (i) it has obtained all necessary approvals, consents and authorizations to enter into this Agreement and to perform its duties under the Agreement; (ii) the person executing this Agreement on its behalf has the authority to do so; (iii) upon execution and delivery of this Agreement by the Parties, it is a valid and binding contract, enforceable in accordance with its terms; and (iv) the execution, delivery, and performance of this Agreement does not violate any bylaw, charter, regulation, law or any other governing authority of the Party.
- 14.13 Equipment End of Life Cycle. Motorola reserves the right to stop selling or shipping Equipment at any time. However, Motorola will provide Customer with a written notice of cancellation of Motorola manufactured Equipment one (1) year prior to the cancellation date. Motorola has no control over third-party vendors' end of life cycle plans for the non-Motorola manufactured Equipment. If a third-party vendor cancels its non-Motorola manufactured Equipment or files for bankruptcy, Motorola will use commercially reasonable efforts to obtain equivalent Equipment from another source.
- 14.14. Insurance Requirements. During the term of this Agreement, Motorola will obtain and maintain at its expense all insurance as required below and will provide to the County a Certificate of Insurance and all required endorsements that are necessary to indicate compliance with these insurance provisions. In addition, all subcontractors performing work on behalf of Motorola pursuant to this Agreement shall obtain and maintain similar insurance as determined by the Motorola Insurance Department, excluding Professional Liability which does not apply to subcontractors. Motorola is responsible for all self-insured retentions (SIRs) and deductibles. Motorola declares that its deductibles are in an amount in excess of \$25,000. If Motorola fails to maintain insurance acceptable to the County as described herein during the term of this Agreement, the County may terminate this Agreement as provided above in Section *.

Qualified Insurer



Minimum insurance company ratings as determined by the most current edition of the Best's Key Rating Guide/Property-Casualty/United States or ambest.com shall be A- (Secure A.M. Best's Rating) and VIII (Financial Size Category).

The policy or policies of insurance must be issued by an insurer licensed to do business in the State of California (California Admitted Carrier). If the carrier is a non-admitted carrier in the state of California and does not meet or exceed an A.M. Best rating of A-/VIII, CEO/Office of Risk Management retains the right to approve or reject carrier after a review of the company's performance and financial ratings. If the non-admitted carrier meets or exceeds the minimum A.M. Best rating of A-/VIII, the agency can accept the insurance.

The policy or policies of insurance maintained by the Contractor shall provide the minimum limits and coverage as set forth below:

Coverage	Minimum Limits
Commercial General Liability	\$1,000,000 per occurrence 2,000,000 aggregate
Automobile Liability including coverage for owned, non-owned and hired vehicles	\$1,000,000 per occurrence
Workers' Compensation	Statutory
Employers' Liability Insurance	\$1,000,000 per occurrence
Professional Liability Insurance	\$1,000,000 per claims made or per occurrence

Required Coverage Forms

The Commercial General Liability coverage shall be written on Insurance Services Office (ISO) form CG 00 01, or a substitute form providing liability coverage at least as broad.

The Business Auto Liability coverage shall be written on ISO form CA 00 01, CA 00 05, CA 0012, CA 00 20, or a substitute form providing coverage at least as broad.

Required Endorsements

The Commercial General Liability policy shall contain the following endorsements, which shall accompany the Certificate of Insurance and be provided per applicable insurance regulations:

An Additional Insured endorsement using ISO form CG 2010 or CG 2033 or a form at least as broad naming the County of Orange, its elected and appointed officials, officers, and employees as Additional Insureds.

The CGL shall be primary and any insurance or self-insurance maintained by the County of Orange shall be excess and non-contributing.

The Workers Compensation policy required by this Agreement shall waive all rights of subrogation against the County of Orange and members of the Board of Supervisors, its elected and appointed officials, officers, and employees when acting within the scope of their appointment or employment.

The Workers Compensation policy shall contain a waiver of subrogation endorsement waiving all rights of subrogation against the County of Orange, and members of the Board of Supervisors, its elected and appointed officials, officers, and employees.

Motorola shall give the County of Orange 30 days notice in the event of cancellation and 10 days notice for non-payment of premium. If Motorola's Professional Liability policy is a "claims made" policy, it shall maintain professional liability coverage for two years following completion of the Agreement.

The Commercial General Liability policy shall contain a severability of interests clause also known as a "separation of insureds" clause (standard in the ISO CG 0001 policy).

Insurance certificates should be forwarded to: the County of Orange at an address it designates.

Subject to the mutual agreement of the Parties, County expressly retains the right to require Motorola to increase or decrease insurance of any of the above insurance types throughout the term of this Contract as deemed by County of Orange Risk Manager as appropriate to adequately protect County. County shall notify Motorola in writing of changes in the insurance requirements. If Motorola does not deposit copies of acceptable certificates of insurance and endorsements with County incorporating such changes within thirty days of receipt of such notice, this Agreement (but not pending orders) may be terminated by County for its convenience.

The procuring of such required policies of insurance shall not be construed to limit Motorola's liability hereunder nor to fulfill the indemnification provisions and requirements of this Agreement, nor act in any way to reduce the policy coverage and limits available from the insurer.



The Parties hereby enter into this Agreement as of the Effective Date.

Motorola Solutions, Inc.

Customer
ORANGE COUNTY, CALIFORNIA

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

EXHIBIT B: SOFTWARE LICENSE AGREEMENT

Exhibit B

Software License Agreement

This Exhibit B Software License Agreement ("Agreement") is between Motorola Solutions, Inc., ("Motorola"), and the County of Orange, a political subdivision of the State of California ("Licensee").

For good and valuable consideration, the parties agree as follows:

Section 1 DEFINITIONS

1.1 "Designated Products" means products provided by Motorola to Licensee with which or for which the Software and Documentation is licensed for use.

1.2 "Documentation" means product and software documentation that specifies technical and performance features and capabilities, and the user, operation and training manuals for the Software (including all physical or electronic media upon which such information is provided).

1.3 "Open Source Software" means software with either freely obtainable source code, license for modification, or permission for free distribution.

1.4 "Open Source Software License" means the terms or conditions under which the Open Source Software is licensed.

1.5 "Primary Agreement" means the agreement to which under this exhibit is attached.

1.6 "Security Vulnerability" means a flaw or weakness in system security procedures, design, implementation, or internal controls that could be exercised (accidentally triggered or intentionally exploited) and result in a security breach such that data is compromised, manipulated or stolen or the system damaged.

1.7 "Software" (i) means proprietary software in object code format, and adaptations, translations, de-compilations, disassemblies, emulations, or derivative works of such software; (ii) means any modifications, enhancements, new versions and new releases of the software provided by Motorola; and (iii) may contain one or more items of software owned by a third party supplier. The term "Software" does not include any third party software provided separate license or third party software not licensable under the terms of this Agreement.

Section 2 SCOPE

Motorola and Licensee enter into this Agreement in connection with Motorola's delivery of certain proprietary Software or products containing embedded or pre-loaded proprietary Software, or both. This

Agreement contains the terms and conditions of the license Motorola is providing to Licensee, and Licensee's use of the Software and Documentation.

Section 3 GRANT OF LICENSE

3.1. Subject to the provisions of this Agreement and the payment of applicable license fees, Motorola grants to Licensee a personal, limited, non-transferable (except as permitted in Section 7) and non-exclusive license under Motorola's copyrights and Confidential Information (as defined in the Primary Agreement) embodied in the Software to use the Software, in object code form, and the Documentation solely in connection with Licensee's use of the Designated Products. This Agreement does not grant any rights to source code.

3.2. If the Software licensed under this Agreement contains or is derived from Open Source Software, the terms and conditions governing the use of such Open Source Software are in the Open Source Software Licenses of the copyright owner and not this Agreement. If there is a conflict between the terms and conditions of this Agreement and the terms and conditions of the Open Source Software Licenses governing Licensee's use of the Open Source Software, the terms and conditions of the license grant of the applicable Open Source Software Licenses will take precedence over the license grants in this Agreement. If requested by Licensee, Motorola will use commercially reasonable efforts to: (i) determine whether any Open Source Software is provided under this Agreement; (ii) identify the Open Source Software and provide Licensee a copy of the applicable Open Source Software License (or specify where that license may be found); and, (iii) provide Licensee a copy of the Open Source Software source code, without charge, if it is publicly available (although distribution fees may be applicable).

Section 4 LIMITATIONS ON USE

4.1. Licensee may use the Software only for Licensee's internal business purposes and only in accordance with the Documentation. Any other use of the Software is strictly prohibited. Without limiting the general nature of these restrictions, Licensee will not make the Software available for use by third parties on a "time sharing," "application service provider," or "service bureau" basis or for any other similar commercial rental or sharing arrangement.

4.2. Licensee will not, and will not allow or enable any third party to: (i) reverse engineer, disassemble, peel components, decompile, reprogram or otherwise reduce the Software or any portion to a human perceptible form or otherwise attempt to recreate the source code; (ii) modify, adapt, create derivative works of, or merge the Software; (iii) copy, reproduce, distribute, lend, or lease the Software or Documentation to any third party, grant any sublicense or other rights in the Software or Documentation to any third party, or take any action that would cause the Software or Documentation to be placed in the public domain; (iv) remove, or in any way alter or obscure, any copyright notice or other notice of Motorola's proprietary rights; (v) provide, copy, transmit, disclose, divulge or make the Software or Documentation available to, or permit the use of the Software by any third party or on any machine except as expressly authorized by this Agreement; or (vi) use, or permit the use of, the Software in a manner that would result in the production of a copy of the Software solely by activating a machine containing the Software. Licensee may make one copy of Software to be used solely for archival, back-up, or disaster recovery purposes; provided that Licensee may not operate that copy of the Software at the same time as the original Software is being operated. Licensee may make as many copies of the Documentation as it may reasonably require for the internal use of the Software.



4.3. Unless otherwise authorized by Motorola in writing, Licensee will not, and will not enable or allow any third party to: (i) install a licensed copy of the Software on more than one unit of a Designated Product; or (ii) copy onto or transfer Software installed in one unit of a Designated Product onto one other device. Licensee may temporarily transfer Software installed on a Designated Product to another device if the Designated Product is inoperable or malfunctioning, if Licensee provides written notice to Motorola of the temporary transfer and identifies the device on which the Software is transferred. Temporary transfer of the Software to another device must be discontinued when the original Designated Product is returned to operation and the Software must be removed from the other device. Licensee must provide prompt written notice to Motorola at the time temporary transfer is discontinued.

4.4. When using Motorola's Radio Service Software ("RSS"), Licensee must purchase a separate license for each location at which Licensee uses RSS. Licensee's use of RSS at a licensed location does not entitle Licensee to use or access RSS remotely. Licensee may make one copy of RSS for each licensed location. Licensee shall provide Motorola with a list of all locations at which Licensee uses or intends to use RSS upon Motorola's request.

4.5. Licensee will maintain, during the term of this Agreement and for a period of two years thereafter, accurate records relating to this license grant to verify compliance with this Agreement. Motorola or an independent third party ("Auditor") may inspect Licensee's premises, books and records, upon reasonable prior notice to Licensee, during Licensee's normal business hours and subject to Licensee's facility and security regulations. Motorola is responsible for the payment of all expenses and costs of the Auditor. Any information obtained by Motorola and the Auditor will be kept in strict confidence by Motorola and the Auditor and used solely for the purpose of verifying Licensee's compliance with the terms of this Agreement.

Section 5 OWNERSHIP AND TITLE

Motorola, its licensors, and its suppliers retain all of their proprietary rights in any form in and to the Software and Documentation, including, but not limited to, all rights in patents, patent applications, inventions, copyrights, trademarks, trade secrets, trade names, and other proprietary rights in or relating to the Software and Documentation (including any corrections, bug fixes, enhancements, updates, modifications, adaptations, translations, de-compilations, disassemblies, emulations to or derivative works from the Software or Documentation, whether made by Motorola or another party, or any improvements that result from Motorola's processes or, provision of information services). No rights are granted to Licensee under this Agreement by implication, estoppel or otherwise, except for those rights which are expressly granted to Licensee in this Agreement. All intellectual property developed, originated, or prepared by Motorola in connection with providing the Software, Designated Products, Documentation or related services, remains vested exclusively in Motorola, and Licensee will not have any shared development or other intellectual property rights.

Section 6 LIMITED WARRANTY; DISCLAIMER OF WARRANTY

6.1. The commencement date and the term of the Software warranty will be a period of ninety (90) days from Motorola's shipment of the Software (the "Warranty Period"). If Licensee is not in breach of any of its obligations under this Agreement, Motorola warrants that the unmodified Software, when used properly and in accordance with the Documentation and this Agreement, will be free from a reproducible defect that eliminates the functionality or successful operation of a feature critical to the primary functionality or successful operation of the Software. Whether a defect occurs will be determined by Motorola solely with reference to the Documentation. Motorola does not warrant that

Licensee's use of the Software or the Designated Products will be uninterrupted, error-free, completely free of Security Vulnerabilities, or that the Software or the Designated Products will meet Licensee's particular requirements. Motorola makes no representations or warranties with respect to any third party software included in the Software.

6.2 Motorola's sole obligation to Licensee and Licensee's exclusive remedy under this warranty is to use reasonable efforts to remedy any material Software defect covered by this warranty. These efforts will involve either replacing the media or attempting to correct significant, demonstrable program or documentation errors or Security Vulnerabilities. If Motorola cannot correct the defect within a reasonable time, then at Motorola's option, Motorola will replace the defective Software with functionally-equivalent Software, license to Licensee substitute Software which will accomplish the same objective, or terminate the license and refund the Licensee's paid license fee.

6.3. Warranty claims are described in the Primary Agreement.

6.4. The express warranties set forth in this Section 6 are in lieu of, and Motorola disclaims, any and all other warranties (express or implied, oral or written) with respect to the Software or Documentation, including, without limitation, any and all implied warranties of condition, title, non-infringement, merchantability, or fitness for a particular purpose or use by Licensee (whether or not Motorola knows, has reason to know, has been advised, or is otherwise aware of any such purpose or use), whether arising by law, by reason of custom or usage of trade, or by course of dealing. In addition, Motorola disclaims any warranty to any person other than Licensee with respect to the Software or Documentation.

Section 7 TRANSFERS

Licensee will not transfer the Software or Documentation to any third party without Motorola's prior written consent. Motorola's consent may be withheld at its discretion and may be conditioned upon transferee paying all applicable license fees and agreeing to be bound by this Agreement. If the Designated Products are Motorola's radio products and Licensee transfers ownership of the Motorola radio products to a third party, Licensee may assign its right to use the Software (other than RSS and Motorola's FLASHport® software) which is embedded in or furnished for use with the radio products and the related Documentation; provided that Licensee transfers all copies of the Software and Documentation to the transferee, and Licensee and the transferee sign a transfer form to be provided by Motorola upon request, obligating the transferee to be bound by this Agreement.

Section 8 TERM AND TERMINATION

8.1 Licensee's right to use the Software and Documentation will begin when the Primary Agreement is signed by both parties and will continue for the life of the Designated Products with which or for which the Software and Documentation have been provided by Motorola, unless Licensee breaches this Agreement, in which case this Agreement and Licensee's right to use the Software and Documentation may be terminated immediately upon notice by Motorola.

8.2 Within thirty (30) days after termination of this Agreement, Licensee must certify in writing to Motorola that all copies of the Software have been removed or deleted from the Designated Products and that all copies of the Software and Documentation have been returned to Motorola or destroyed by Licensee and are no longer in use by Licensee.

8.3 Licensee acknowledges that Motorola made a considerable investment of resources in the development, marketing, and distribution of the Software and Documentation and that Licensee's breach



of this Agreement will result in irreparable harm to Motorola for which monetary damages would be inadequate. If Licensee breaches this Agreement, Motorola may terminate this Agreement and be entitled to all available remedies at law or in equity (including immediate injunctive relief and repossession of all non-embedded Software and associated Documentation unless Licensee is a Federal agency of the United States Government).

Section 9 UNITED STATES GOVERNMENT LICENSING PROVISIONS

This Section applies if Licensee is the United States Government or a United States Government agency. Licensee's use, duplication or disclosure of the Software and Documentation under Motorola's copyrights or trade secret rights is subject to the restrictions set forth in subparagraphs (c)(1) and (2) of the Commercial Computer Software-Restricted Rights clause at FAR 52.227-19 (JUNE 1987), if applicable, unless they are being provided to the Department of Defense. If the Software and Documentation are being provided to the Department of Defense, Licensee's use, duplication, or disclosure of the Software and Documentation is subject to the restricted rights set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 (OCT 1988), if applicable. The Software and Documentation may or may not include a Restricted Rights notice, or other notice referring to this Agreement. The provisions of this Agreement will continue to apply, but only to the extent that they are consistent with the rights provided to the Licensee under the provisions of the FAR or DFARS mentioned above, as applicable to the particular procuring agency and procurement transaction.

Section 10 CONFIDENTIALITY

Licensee acknowledges that the Software and Documentation contain Motorola's valuable proprietary and Confidential Information and are Motorola's trade secrets, and that the provisions in the Primary Agreement concerning Confidential Information apply.

Section 11 LIMITATION OF LIABILITY

The Limitation of Liability provision is described in the Primary Agreement.

Section 12 NOTICES

Notices are described in the Primary Agreement.

Section 13 GENERAL

13.1. COPYRIGHT NOTICES. The existence of a copyright notice on the Software will not be construed as an admission or presumption of publication of the Software or public disclosure of any trade secrets associated with the Software.

13.2. COMPLIANCE WITH LAWS. Licensee acknowledges that the Software is subject to the laws and regulations of the United States and Licensee will comply with all applicable laws and regulations, including export laws and regulations of the United States. Licensee will not, without the prior authorization of Motorola and the appropriate governmental authority of the United States, in any form export or re-export, sell or resell, ship or reship, or divert, through direct or indirect means, any item or technical data or direct or indirect products sold or otherwise furnished to any person within any territory for which the United States Government or any of its agencies at the time of the action, requires

an export license or other governmental approval. Violation of this provision is a material breach of this Agreement.

13.3. ASSIGNMENTS AND SUBCONTRACTING. (Covered by the primary agreement.)

13.4. GOVERNING LAW. The terms of the U.N. Convention on Contracts for the International Sale of Goods do not apply. In the event that the Uniform Computer Information Transaction Act, any version of this Act, or a substantially similar law (collectively "UCITA") becomes applicable to a party's performance under this Agreement, UCITA does not govern any aspect of this Agreement or any license granted under this Agreement, or any of the parties' rights or obligations under this Agreement. The governing law will be that in effect prior to the applicability of UCITA.

13.5. THIRD PARTY BENEFICIARIES. This Agreement is entered into solely for the benefit of Motorola and Licensee. No third party has the right to make any claim or assert any right under this Agreement, and no third party is deemed a beneficiary of this Agreement. Notwithstanding the foregoing, any licensor or supplier of third party software included in the Software will be a direct and intended third party beneficiary of this Agreement.

13.6. SURVIVAL. Sections 4, 5, 6.3, 7, 8, 9, 10, 11 and 13 survive the termination of this Agreement.

13.7. ORDER OF PRECEDENCE. In the event of inconsistencies between this Exhibit and the Primary Agreement, the parties agree that this Exhibit prevails, only with respect to the specific subject matter of this Exhibit, and not the Primary Agreement or any other exhibit as it applies to any other subject matter.

13.8 SECURITY. Motorola uses reasonable means in the design and writing of its own Software and the acquisition of third party Software to limit Security Vulnerabilities. While no software can be guaranteed to be free from Security Vulnerabilities, if a Security Vulnerability is discovered, Motorola will take the steps set forth in Section 6 of this Agreement.



EXHIBIT C: COUNTY PARTICIPANTS

City	Responsible Administrator	Address	Phone #
Aliso Viejo	City Manager	12 Journey #100 Aliso Viejo, CA 92656	949/425-3800
Anaheim	City Manager	200 S. Anaheim Blvd. P.O. Box 3222 Anaheim, CA 92805	714/765-5162
Brea	City Manager	1 Civic Center Circle Brea, CA 92821-5732	714/990-7770
Buena Park	City Manager	6650 Beach Blvd. P.O. Box 5009 Buena Park, CA 90622	714/562-3550
Costa Mesa	City Manager	77 Fair Drive P.O. Box 1200 Costa Mesa, CA 92626	714/754-5327
Cypress	City Manager	5275 Orange Avenue P.O. Box 609 Cypress, CA 90630	714/229-6688
Dana Point	City Manager	33282 Golden Lantern, Suite 210 Dana Point, CA 92629	949/248-3513
Fountain Valley	City Manager	10200 Slater Avenue Fountain Valley, CA 92708	714/593-4410
Fullerton	City Manager	303 W. Commonwealth Fullerton, CA 92832	714/738-6310
Garden Grove	City Manager	11222 Acacia Parkway P.O. Box 3070 Garden Grove, CA 92840	714/741-5100
Huntington Beach	City Administrator	2000 Main Street P.O. Box 190 Huntington Beach, CA 92648	714/536-5575
Irvine	City Manager	1 Civic Center Plaza P.O. Box 19575 Irvine, CA 92606	949/724-6249
Laguna Beach	City Manager	505 Forest Avenue Laguna Beach, CA 92651-2394	949/497-0704

City	Responsible Administrator	Address	Phone #
Laguna Hills	City Manager	24035 El Toro Road Laguna Hills, CA 92653	949/707-2610
Laguna Niguel	City Manager	30111 Crown Valley Parkway Laguna Niguel, CA 92637	949/362-4300
Laguna Woods	City Manager	24264 El Toro Road Laguna Woods, CA 92653	949/452-0600
La Habra	City Manager	201 E. La Habra Blvd. P.O. Box 337 La Habra, CA 90633-0337	562/905-9701
Lake Forest	City Manager	25550 Commercentre Drive #100 Lake Forest, CA 92630	949/461-3410
La Palma	City Manager	7822 Walker Street La Palma, CA 90623	714/523-7700
Los Alamitos	City Manager	3191 Katella Avenue Los Alamitos, CA 90720-5600	562/431-3538
Mission Viejo	City Manager	200 Civic Center Mission Viejo, CA 92691	949/470-3051
Newport Beach	City Manager	100 Civic Center Drive P.O. Box 1768 Newport Beach, CA 92660	949/644-3300
Orange	City Manager	300 East Chapman Ave. P.O. Box 449 Orange, CA 92866	714/744-2222
Placentia	City Administrator	401 East Chapman Placentia, CA 92870	714/993-8117
Rancho Santa Margarita	City Manager	22112 El Paseo Rancho Santa Margarita, CA 92688	949/635-1800
San Clemente	City Manager	100 Avenida Presidio San Clemente, CA 92672	949/361-8322
San Juan Capistrano	City Administrator	32400 Paseo Adelanto San Juan Capistrano, CA 92675	949/493-1171
Santa Ana	City Manager	20 Civic Center Plaza P.O. Box 1988 M30 Santa Ana, CA 92701	714/647-5200
Seal Beach	City Manager	211 Eighth Street Seal Beach, CA 90740-6379	562/431-2527 ext. 300
Stanton	City Manager	7800 Katella Avenue Stanton, CA 90680	714/379-9222



City	Responsible Administrator	Address	Phone #
Tustin	City Manager	300 Centennial Way P.O. Box 1089 Tustin, CA 92781-1089	714/573-3010
Villa Park	City Manager	17855 Santiago Blvd. Villa Park, CA 92861	714/998-1500
Westminster	City Manager	8200 Westminster Blvd. Westminster, CA 92683	714/898-3311
Yorba Linda	City Manager	4845 Casa Loma Avenue P.O. Box 87014 Yorba Linda, CA 92885	714/961-7110
West Cities Communications Center (West-Comm)	West-Comm Administrator	911 Seal Beach Blvd. Seal Beach, CA 90740	562/594-7240
Metro Net Fire Dispatch Center	Communications Manager	201 So. Anaheim Blvd. Suite 302 Anaheim, CA 92805	714/254-4077
District Attorney	District Attorney	700 Civic Center Drive West P.O. Box 808 Santa Ana, 92702-0808	714/834-3636
OC Public Works	Director	300 N. Flower St. Santa Ana, CA 92703-5000	714/834-5302
Health Care Agency	Director	405 W. 5 th Street Santa Ana, CA 92701	714/834-6021
OC Waste and Recycling	Director	320 N. Flower St., Suite 400 Santa Ana, CA 92703	714/834-4122
John Wayne Airport	Airport Director	3160 Airway Avenue Building K-101 Costa Mesa, CA 92626	714/252-5183
Probation Department	Chief Probation Officer	909 North Main St., Suite 1 Santa Ana, CA 92701	714/569-2300
Sheriff-Coroner Department	Sheriff-Coroner	550 N. Flower St. P.O. Box 449 Santa Ana, CA 92702	714/647-1800
Orange County Fire Authority	Fire Chief	1 Fire Authority Road Irvine, CA 92602	714/573-6000
Orange County Transportation Authority	Lesley Attanese	P.O Box 14184 Orange, CA 92863-1584	714/265-4389

City	Responsible Administrator	Address	Phone #
California State University Fullerton Police Department		P.O. Box 6806 Fullerton, CA 92834-6806	657/278-2515
University of California, Irvine Police Department	Barbara Barry	150 Public Services Building Irvine, CA 92697-4900	949/824-5688
California Highway Patrol Helicopters	Bob Fablee	3865-A W. Commonwealth Ave. Fullerton, CA 92833	714/449-7091
Huntington Beach Union High School District Police	Ryan Hasegawa	10251 Yorktown Ave. Huntington Beach, CA 92646-2999	714/893-1381
FBI	Dan Koch	11000 Wilshire Blvd., Ste. 1700 Los Angeles, CA 90024	310/996-3720
California State Parks		8471 North Coast Highway Laguna Beach, CA 92651	949/497-1582
JTFB Fire Department	Tom McKinnon	4250 Constitution Los Alamitos, CA 90720	562/795-2144
Boeing Fire Department	Michael Nelson	2600 Westminster Blvd. Seal Beach, CA 90740	562/797-3188
Disneyland Fire Department		1313 S. Harbor Blvd. Anaheim, CA 92803-3232	714/781-4666
La Habra Heights Fire Department	John Nielsen	1245 N. Hacienda Road La Habra Heights, CA 90631	562/694-8283
Mercy Air	Melissa Schmier	P.O. Box 2532 Fontana, CA 92334	909/841-2820
Naval Weapons Station Fire Department	Larry Bach	Fire Division Code N23 800 Seal Beach Blvd. Seal Beach, CA 90740-5000	562/626-7005
Sanitation District of Orange County	Howard Lembke	10844 Ellis Ave. Fountain Valley, CA 92728	714/593-7270
United States Forest Service	James Nordenger	P.O. Box 897 Poway, CA 92074	858/695-0258
Care Ambulance	Bill Weston	1517 W. Braden Court Orange, CA 92868	714/828-7750
Doctor's Ambulance	Jim Ignacio	23091 Terra Drive Laguna Hills, CA 92653	949/951-8535 ext. 206
Emergency Ambulance	Jim Karras	3200 East Birch #A Brea, CA 92821	714/990-1742



City	Responsible Administrator	Address	Phone #
Medix Ambulance	Michael Dimas	26021 Pala Drive Mission Viejo, CA 92691	949/470-8921
Schaefer Ambulance		2215 South Bristol Ave. Santa Ana, CA 92704	714/545-8486
Los Angeles County Sheriff Aero Bureau		3235 Lakewood Blvd. Long Beach, CA 90808	562/421-2701
Signal Hill Police Department	Police	1800 East Hill Street Signal Hill, CA 90755	562/989-7200
Corona Fire Department	Fire	815 W. 6 th Street Corona, CA 92882	909/736-2220
Americare Ambulance	Scott Smith	820 W. Lomita Blvd. Harbor City, CA 90710	310/835-9300
Camp Pendleton Fire	Fire Chief	P.O. Box 555211 Camp Pendleton, CA 92055	760/725-4321
DEA	Agent in Charge	1900 E. 1st St. Santa Ana, CA 92705	714/647-4901
Pacific Ambulance	Paul Scarborough	22541 Aspan St. #E Lake Forest CA 92630	949/470-2355
Saddleback College Police	Police Chief	28000 Marguerite Parkway. Mission Viejo, CA 92692	949/582-4500
Irvine Valley College	Police Chief	5500 Irvine Center Dr. Irvine, CA 92618	949/451-5200
Santa Ana School District Police	Police Chief	1601 E. Chestnut Ave. Santa Ana, CA 92701	714/558-5535
Department of Justice	Agent in Charge	874 Town & Country Road Orange, CA 92868	714/558-4183
Calif. Depart. of Corrections & Rehab.		829 Marlborough Ave. Riverside, CA 92507	916/324-6919
U.S. Immigration & Customs Enforcement	Agent in Charge	34 Civic Center Plaza Santa Ana, CA 92701	202/732-4200
OC Community Resources	Director	1770 N. Broadway, 4 th Floor Santa Ana, CA 92706	714/480-2900



Orange County Fire Authority
AGENDA STAFF REPORT

Executive Committee Meeting
February 24, 2022

Agenda Item No. 2I
Consent Calendar

**Increase Blanket Order Contract for
Firefighter Turnout Personal Protective Equipment (PPE)**

Contact(s) for Further Information

Jim Ruane, Assistant Chief/
Logistics Department

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714.573.6801

Russ Snider, Service Center Supervisor
Logistics Department

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714.573.6601

Summary

This agenda item is submitted for approval to increase the previously approved Blanket Order contract with AllStar Fire Equipment, Inc. (AllStar) for the purchase of additional and as-needed replacement turnout personal protective equipment (PPE) for Firefighters.

Prior Board/Committee Action

Executive Committee approval to exercise the two one-year contract renewal options for the supply of firefighter turnout clothing and structural firefighting gloves by AllStar Fire Equipment was provided on January 25, 2018, and April 26, 2018, respectively. On February 27, 2020, the Executive Committee approved the extension of this contract for PPE for an initial term of two years plus three optional one-year renewals.

RECOMMENDED ACTION(S)

Approve and authorize the Purchasing Manager to increase the previously approved Blanket Order contract with AllStar by \$380,000 to an annual amount not to exceed \$1,139,000 for the current renewal term (Contract Year Three) in addition to each of the remaining optional two one-year renewals (Contract Years Four and Five, respectively).

Impact to Cities/County

Not Applicable.

Fiscal Impact

Increased Cost Funded by Structural Fire Fund:	\$267,000
Increased Cost Funded by Cash Contract Cities:	\$113,000

Funds are included in the FY 2021/22 General Fund budget, specifically in the Logistics Service Center budget for clothing and personal supplies. Additional funding necessary to cover the Blanket Order cost increase will be included in the FY 2021/22 mid-year budget process.

Background

In 2014 staff issued RFP DC1925 as the lead agency in a joint solicitation with the City of Anaheim, which resulted in both agencies awarding competitive agreements to AllStar for Lion manufactured PPE. On October 3, 2019, staff issued Request for Information SK2365 to determine

whether significant advances in PPE technology had been made since OCFA's current turnouts were selected. An evaluation panel reviewed the submittals representing three manufacturers, and determined that new available PPE technology did not warrant moving away from the current specification. As such, staff requested to extend the agreement for the remaining five years of the turnouts' recommended serviceable life (10 years total), allowing staff to establish an updated PPE specification and issue a Request for Bids for the replacement PPE later this year.

In December 2021, OCFA was notified that due to significant price increases from suppliers who produce the materials used in the manufacturing of PPE, AllStar has passed along the suppliers' 25% price increase to OCFA.

Recommendation

Based on the information provided by AllStar, the supplier of OCFA's turnouts, and Lion, the manufacturer, staff believes that the current market conditions will remain in place for the foreseeable future. Because the current Blanket Order contract amount is insufficient to absorb the above described higher prices, staff recommends an increase in the contract amounts by \$380,000 to an annual amount not to exceed \$1,139,000 for the remainder of the current renewal term (Contract Year Four) in addition to each of the two remaining optional one-year renewal terms (Contract Years Four and Five, respectively).

Attachment

Proposal for Contract Extension B01569 - Firefighter Turnouts and Structure Gloves



2-14-22

Orange County Fire Authority
Purchasing Department
Attn: Russ Snider
1 Fire Authority Road
Irvine, Ca 92602

Ref: Contract Extension B01569 – Firefighter Turnouts and Structure Gloves

Dear Sir:

Lion Apparel has informed us of a noticeable price increase on the above-mentioned turnout contract. Due to increases in material costs, labor, insurance and transportation costs we must raise the price by 25%

These new prices will go into effect immediately.

Regards,

A handwritten signature in blue ink, appearing to read "John Sprengelmeyer", is written over a circular blue ink stamp.

John Sprengelmeyer
Inside Sales



LION[®]

TURNOUT GEAR PRICING PROPOSAL

JANUARY 2022

CONFIDENTIAL

Privileged & Confidential



OCFA TURNOUT GEAR COST SUMMARY – 2019 to 2022

27% Total Manufacturer Cost Increase

Materials +27%

Manufacturing +27%



Unpublished & Confidential

THE STATE OF MANUFACTURING:

COVID-19's Impact on Global Supply Chain

AND HOW IT'S AFFECTING FIRE SERVICE PRODUCT DELIVERIES

94%

of Fortune 1000 companies are seeing supply chain disruptions from COVID-19.

75%

of companies have had negative or strongly negative impacts on their businesses.

55%

of companies plan to downgrade their growth outlooks for have already done so.¹

"This is unprecedented in its scale and in the extent of it. We've never seen a disruption like this..."²

THE STATE OF MANUFACTURING:

Employers in sectors like manufacturing, restaurants and production are struggling to find workers. Job openings in manufacturing have declined in March 2020 and remain people in the labor force, according to the Bureau of Labor Statistics.

What's Driving the Rapid Price Increases for Turnout Gear?

Product Prices Are On The Rise...

- Consumer prices in June rose 0.9% from May and **5.4% over the past year** — the sharpest 12-month inflation spike since August 2008. Excluding volatile oil and gas prices, so-called core inflation rose 4.5% in the past year, the largest increase since November 1991.
- Restaurant prices rose 0.7% last month and **4.2% over the past year**, a sign that many companies are raising prices to offset higher labor costs.
- The cost of household furniture increased 0.7% from May to June and **8.6% compared with a year ago**, as more Americans have upgraded their homes after spending more time there during the pandemic. Mohawk Industries, which makes carpets and tiles, has said it will raise prices 6% to 10% — its third price hike of the year — to cover higher costs for raw material, labor and shipping.⁴



Half (49%) of Americans who became unemployed during the pandemic say they are not actively or not very actively looking for work. Less than a third (32%) report that they are strongly active in their job search.

Six in 10 (61%) say they are in no hurry to return to work. Three in 10 (30%) say they do not expect to return to work this year, with nearly half of those (13% of the total) saying they never plan to return to work.⁵

THE STATE OF MANUFACTURING:

COVID-19's Impact on the Global Supply Chain

PRODUCT DELIVERY IMPACT

HOW PRODUCT LEAD TIMES ARE BEING IMPACTED

FIRE SERVICE PRODUCTS	OTHER PRODUCTS
Gear Zippers — 16 Weeks	La-Z-Boy Furniture — 5 to 9 Weeks ⁶
Gear Snaps — 7 Weeks	Titleist Golf Clubs — 16 weeks ⁷
Reflective Trim — 8 to 12 Weeks	Ford F-150 Pickups — 5 to 21 Weeks ⁸
Chembo Gloves — 8 to 13 Weeks	Refrigerators — Up to Several Months ⁹

"The American Fire Service has been significantly impacted by manufacturing shutdowns due to COVID-19. The supply chain disruption has resulted in raw material scarcities impacting downstream suppliers of emergency equipment. This disruption is causing increased lead times and back orders of required equipment in some emergency services. Emergency departments are having to respond with increased inventory holdings and closer monitoring of burn rates to respond to supply chain volatility."

— Chief Ray Lozano, Resource Management
Houston Fire Department



TO REDUCE THE IMPACT OF SUPPLY CHAIN DISRUPTIONS, WE'RE PROACTIVELY...

- EXPANDING MANUFACTURING CAPACITY
- TRYING TO INCREASE WORKFORCE WITH INCREASED WAGES AND INCENTIVES



What do the economists say about the future?

- Predicting a slow return to pre-pandemic labor force
- Expect inflation
- Need for changes to our supply chain infrastructure

SOURCES:

- ¹ Accenture: <https://www.accenture.com/us-en/insights/manufacturing/innovative-supply-chain-disruption>
- ² The Wall Street Journal, May 2021: <https://www.wsj.com/articles/many-unemployed-stay-at-home-companies-find-work-1161060443>
- ³ The White House, April 14, 2021: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/14/statement-by-economic-staff-on-the-latest-data-on-the-economy/>
- ⁴ AP News, July 2021: <https://apnews.com/article/business-prices-consumer-prices-70d4-c0f8bd4c0b1b6858a4d8b05d>
- ⁵ U.S. Chamber of Commerce: <https://www.uschamber.com/report/but-the-covid-19-unemployed>
- ⁶ Business Insider, May 2021: <https://www.businessinsider.com/why-supply-shortage-economy-inventory-chips-lumber-can-take-papers-2021-5#lumber-and-palm-oil-4>
- ⁷ Bloomberg, August 2021: <https://www.bloomberg.com/news/articles/2021-08-26/supply-chain-shortages-leave-golfers-to-wait-months-for-new-clubs>
- ⁸ Dornier, July 2021: <https://www.dornier.com/news/feature-updates/ford-trucks-production-updates/>
- ⁹ Better Homes & Gardens, July 2021: <https://www.bhg.com/news/appliances/backordered-kitchen-appliances/>



RAPID RISE IN MARKET PRICES FOR TURNOUT GEAR:

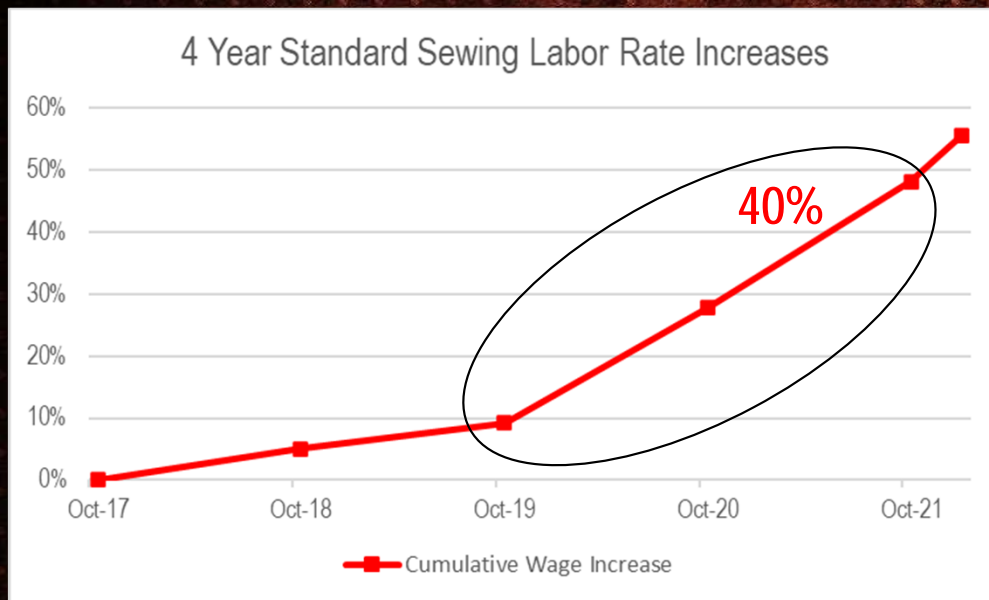
2022: \$3,000

2019: \$2,200

+40% in 3 years for same spec

↑ + 40%

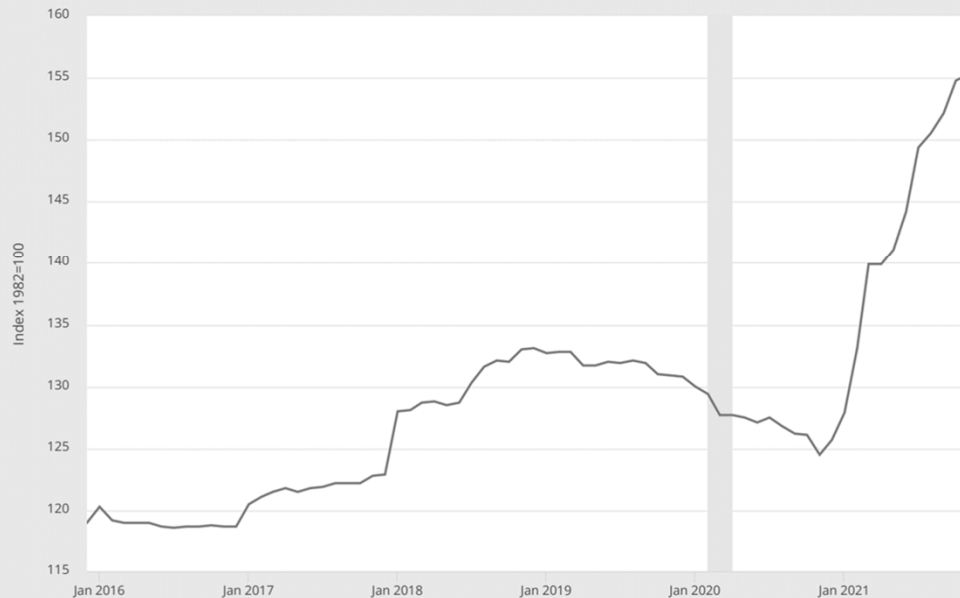




COVID-19 outbreaks coupled with government subsidies paid to workers have led to turnover rates of **48%** in our plants

LION has seen plant wage escalation of **40%** in order to recruit and retain workers

FRED — Producer Price Index by Commodity: Textile Products and Apparel: Synthetic Fibers



Shaded areas indicate U.S. recessions.

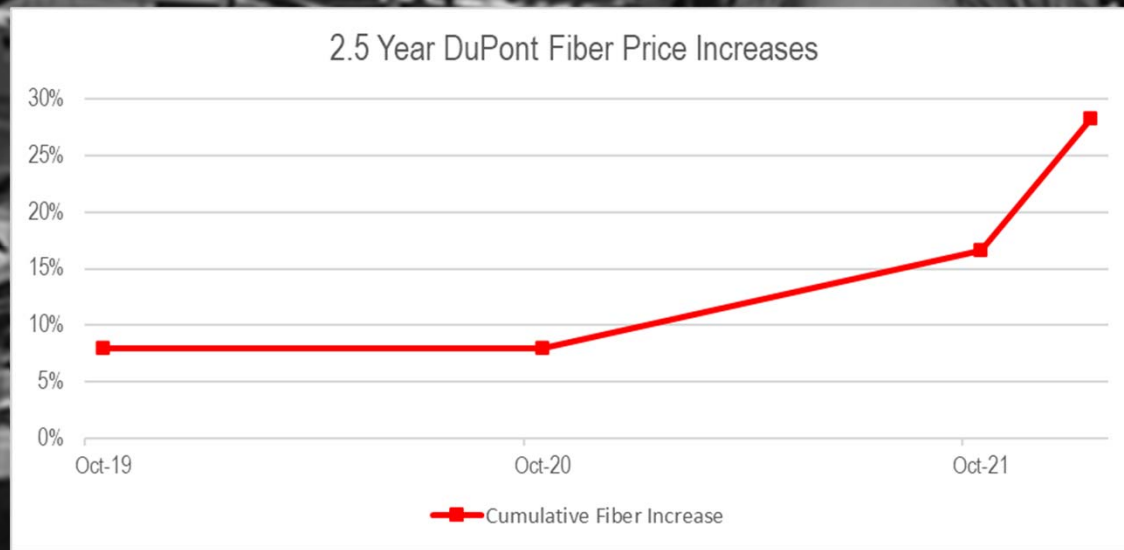
Source: U.S. Bureau of Labor Statistics

fred.stlouisfed.org

Producer Price Index for synthetic textile fibers are up over **22%** from last October

Most consider 'transitory,' in the context of inflation, to mean short-lived, but the Fed believes that 'transitory' means that inflation will not lead to permanent economic damage. It is a good time "to retire" the term.

Federal Reserve Chairman Jerome Powell Nov 30, 2021



DuPont has executed 3 separate price increases in the last 27 months totaling **28.3%**

DuPont makes Kevlar and Nomex fibers that are used in all turnouts

DuPont's Kevlar and Nomex fibers are used in the majority of turnout materials



Outershell

PBI Max
70% PBI (60%)/Kevlar
(40%) spun yarns / 30%
Kevlar filament



Thermal Liner

Glide Ice 2L Araflo
60% Nomex Filament / 30%
Nomex spun / 10% Lenzing
facecloth quilted to
Nomex/Kevlar spunlace



Moisture Barrier

Crosstech Black
Membrane laminated to
Nomex substrate

Other Materials Containing Nomex

- Trim with Nomex backing
- Nomex Thread
- Nomex IIIA small parts
- Zippers with Nomex Tape