UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

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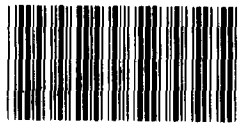
LOGISTICS AND COMMUNICATIONS DIVISION



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B-157476

MARCH 2, 1979

The Honorable G. William Whitehurst
House of Representatives

Dear Mr. Whitehurst:

Your March 2, 1978, letter requested that we review correspondence sent to you by Mr. Paul G. Caplan, Chairman of the Board of Commissioners of the Norfolk Port and Industrial Authority. Mr. Caplan points out that with the recent congressional action to deregulate domestic air cargo rates (Public Law 95-163, Nov. 9, 1977), air cargo service at the Norfolk International Airport can be improved. He feels that the military will benefit by using scheduled air carriers to distribute its supplies. Therefore, he asks that we consider

--identifying the military cargo which could be a candidate for shipping through the Norfolk airport, and

--evaluating the procedures by which the military distributes its supplies.

We agreed to look at the effect of deregulation on the Department of Defense's (DOD's) distribution patterns and policies and to provide you with data on the volume of cargo originating in the Norfolk area. These matters were briefly discussed with Mr. Ken Scott, Executive Director of the Port and Industrial Authority, at the time of our visit with the military shipping officials in Norfolk.

In summary, we found that the deregulation has had little effect on how DOD distributes its supplies and uses commercial air freight services. Generally, air freight rates are higher than the rates DOD pays for surface transportation, and air rates have not lowered appreciably with deregulation.

DOD's policy is to use airlift whenever such service can meet customers' needs and offer cost advantages. Cost considerations include transportation charges as well as reduced investment costs which result when inventories are reduced through using expedited transportation.

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report

In practice, DOD uses scheduled commercial air carriers only when its own aircraft, such as those of the Military Airlift Command (MAC), or its commercially contracted airlift systems, such as the Navy's QUICKTRANS system, cannot provide satisfactory service. Commercial air service is used for small package cargo or for backup to carry the overflow cargo of the contract and MAC services. In the Norfolk area, the overflow cargo is generally containerized and routed to airports beyond Norfolk because no airlines serving the Norfolk airport are providing aircraft capable of handling large containers.

DOD recognizes the advantages of using airlift in its distribution programs. Its contract airlift systems serve many domestic points where commercial air service is infrequent. These systems are also intended to expedite the shipment of high value and short supply items. DOD is using its MAC airlift to deliver spare parts and critical components to many of its overseas customers. Its routing officials are aware of rates for all modes of transportation and can make the proper decision to use air freight when it is cost advantageous.

DOD is also aware that the Congress feels the agency is using too much airlift. The conference report of the House and Senate Appropriations Committees on the fiscal year 1979 DOD appropriation bill directs the Air Force and Navy to reduce the reliance on commercial air delivery within the United States during peacetime and enhance the numbers and types of spare parts and components maintained locally to support their military units. The conference committee feels that the cost to increase inventories will be more than offset by reduction of airlift costs. This approach seems inconsistent with the findings of a recent Navy contract study performed in the Norfolk area. That study, performed by the Air Cargo Research Institute of Philadelphia, concluded that the Navy could save inventory investment costs by using airlift for some shipments now moving by surface.

In light of DOD's rather extensive use of airlift, the Navy's ongoing review of the mode selection study, and the recent actions of the Congress, we do not believe it would be appropriate for us to initiate an indepth study on DOD's distribution of supplies at this time. However, we will

continue to monitor the Navy's progress on reviewing the results of its contract study. We will also be watching the future trend of air freight rates as carriers take more advantage of the deregulation law and will consider whether it is feasible for the Government to increase the use of airlift to move its supplies in the normal course of our DOD logistics studies.

DEREGULATION OF AIR CARGO RATES

One of the main arguments for deregulation of air cargo rates was that carriers would be free to operate any routes they wanted to without regulatory interference and the ensuing competition would drive rates down, making them competitive with surface carriers' rates. This has not happened to any great extent. In most cases, rates have gone up. Consequently, the charges paid by DOD to ship by surface are still less than commercial air charges.

Historically, air freight rates have been considerably higher than surface rates. For example, DOD's average cost to ship air freight during the quarter ending March 31, 1978, was $0.45 a pound compared with a surface rate of $0.09 a pound to ship in less-than-truckload quantities. As shown in enclosure I, DOD shippers in the Norfolk area paid an average of $0.49 a pound to ship via air freight and $0.09 a pound for less-than-truckload surface shipments. The individual comparisons vary from State to State; nevertheless, every case is significantly different.

The following chart compares the air and surface cost for shipments from Norfolk to the States where most shipments are destined.

	Average cost per pound	
Destination State	Air freight	Less-than-truckload
California	$0.46	$0.16
Texas	.68	.13
Louisiana	.62	.10
Florida	.45	.07
Ohio	.44	.09
New York	.33	.09

With the enactment of Public Law 95-163--the Air Cargo Deregulation Act--those pushing for deregulation had hoped the air carriers would be more competitive and that such competition would lead to lower rates. This, however, has not happened to any appreciable degree.

Relatively few carriers have added new cities or larger aircraft to accommodate larger-scale freight operations. And one large transcontinental carrier has discontinued all freighter service, limiting service to that which can be accommodated in the belly compartments of its passenger aircraft.

Rates have not substantially decreased either. Instead, most have increased. Soon after deregulation, in April 1978, the industry raised rates 9 percent. The industry argued that rates had been unrealistically low. This January, the major east-west carrier serving Norfolk is raising rates another 8 to 15 percent. The carrier argues that past regulatory constraints of the Civil Aeronautics Board have held rates lower than justified by carrier operating costs.

However, a few rates have been reduced since deregulation. The largest U.S. all-cargo carrier has announced reductions of as much as 15 percent. Also, the east-west carrier at Norfolk has offered a number of special discounts for the military, including Norfolk shippers. However, in both cases the discounts apply to containerized shipments for which no airlift is available at Norfolk. Containerized shipments must, by necessity, be trucked to Baltimore, Washington, or even New York for carriage on wide-body or all-cargo aircraft.

Another east-west carrier has tried to encourage shippers to increase their use of air freight by offering a special contract tariff with rates generally competitive with many commercial surface rates. Unfortunately, Norfolk shippers would have to truck the traffic to Baltimore before they could use these rates. For DOD shippers in general, the tariff was unattractive because it required shippers to contractually agree to generate a set number of shipments for a 26-week period. DOD generally avoids such commitments, particularly when it already has contract airlift available within its QUICKTRANS and LOGAIR systems. In any event, the rates the carrier was offering were still not competitive with DOD's special section 22 less-than-truckload rates.

Since the tariff apparently did not attract any commercial business either, it was canceled in November.

Shown below is a comparison of charges for shipments from Norfolk to San Francisco. These charges were effective in the fall of 1978.

Shipment size (pounds)	Air freight charge	Less-than-truckload charge (note a)
1,000	b/$ 485.75	$ 145.00
2,500	b/485.75	335.00
5,000	c/1,540.25	665.00
10,000	c/2,605.25	1,145.00

a/Rocky Mountain Motor Tariff Bureau section 22 quotation charges.

b/LD-3 container charge, including pickup and delivery.

c/A-2 container charge, including pickup and delivery.

Of course, the law on deregulation and its effect on DOD's shipping plans has not yet had sufficient time to prove itself. Only in November 1978 did the law permit free entry of all potential companies to air freight. Also, a severe shortage of cargo aircraft limits those wanting to begin freight service. For those wishing to expand their existing operations, the recent legislation to deregulate passenger traffic has pushed passenger business to the forefront. Aircraft which may have been previously intended for freight operations will probably be committed to passenger business as carriers open new markets. Therefore, a conclusion as to whether freight rates will drop to become competitive with DOD's surface rates may still be some time away.

DOD POLICY ON USING AIRLIFT SERVICES

As your constituent points out, the decision to use airlift should not be made on transportation costs alone because other benefits or savings could be accrued, such as better customer satisfaction and reductions in inventory carrying costs.

We discussed the use of airlift as a means of moving supplies with DOD officials, and they believe that they appropriately consider that option when deciding how to distribute supplies.

Under DOD policy, airlift services are to be considered along with all other transportation modes. When selecting the transport mode, both transportation rates as well as inventory investment savings which might result from reducing the delivery time periods are to be considered. Also shipping officials are to consider using DOD's owned or contracted airlift resources.

In DOD Directive 4500.9, DOD policy on mode selection is as follows:

> "The means of transportation selected shall be that which will meet DOD requirements satisfactorily at the lowest overall cost from origin to the final known destination (in CONUS or overseas). In determining the lowest overall cost, consideration will be given to the extent to which expedited movement will contribute to economies through reductions in pipeline or stored supplies, shipment preparation costs, cargo loss and damage, personnel travel time, and the cost of transportation space procured for the DOD by the Transportation Single Managers * * *. In addition, the benefits of routing cargo in such a way as to permit consolidation of shipments and distribution of fixed costs through the use of Government-controlled resources will be considered * * *."

The responsibility for carrying out this policy rests with all DOD inventory and traffic managers. To exercise control and limit the size of the supply systems' inventories, DOD requires its supply manager to identify critical and essential items for intensive management. The degree of management to be applied to these items is based on such factors as dollar value of predicted demands, the monetary inventory value, and the criticalness or essentialness of the items. Generally, the higher the degree of management required to be given to an item, the greater likelihood the item, when shipped, will move via airlift. Examples of such items are aircraft and aircraft engine parts.

To minimize its transportation costs, DOD centrally manages the choice of mode and carrier to be used. The Army's Military Traffic Management Command (MTMC) is the central manager responsible for providing routing information to all DOD shippers, and it maintains files on all rate tariffs and special Government section 22 quotations. When shipments are offered to MTMC by military shippers, MTMC compares air freight rates with surface rates for the shipment and advises the local shipping officials of the least cost routes. But, because of the large volume of shipments DOD must move, MTMC's routing of every shipment is impossible. Accordingly, MTMC routes only the larger shipments--10,000 pounds and over by surface and 1,000 pounds and over by air. Other shipments are routed by local installation transportation officers.

Generally, MAC arranges overseas air shipments. Local installation transportation officers, before offering shipments to MAC, must have them cleared by their particular service clearance authority to ensure that they are appropriate for airlift. Generally, the appropriateness is measured in terms of shipment weight, size, quantity, urgency of need, and commodity type.

DOD also has arranged for two scheduled, commercially operated, airlift systems for use in moving air shipments within the United States. The Navy's system is called QUICKTRANS and is managed by the Navy Supply Systems Command. The Air Force's system is called LOGAIR and is managed by the Air Force Logistics Command.

Navy and Air Force directives generally require shippers to give priority to the use of the QUICKTRANS, LOGAIR, and MAC over the regularly scheduled commercial air carriers because the cost for these services is already committed, either through direct ownership or on long-term contracts. The QUICKTRANS and LOGAIR contracts, for example, are awarded for 1 year and provide for regular schedules at set route mileage charges. Accordingly, there is every incentive to make the maximum use of such flights and avoid paying charges for other types of commercial air freight. Commercial services generally are used only for shipments to off-line points or for overflow cargo from the contract systems. The use of commercial air freight from Norfolk is summarized in enclosure I. The use of the QUICKTRANS system from Norfolk is summarized in enclosure II.

We believe that the military services have recognized and considered the economic value of airlift in their various distribution programs. In addition to the LOGAIR and QUICKTRANS domestic systems, the Air Force and the Army have developed programs and are using MAC airlift to resupply many of their overseas customers on a routine basis. Reduced inventory investment and improved customer satisfaction were cited as target objectives in establishing these programs.

The Navy's interest in increasing the use of airlift to move supplies and reduce costs is evident by its September 1977 award of a contract (N00104-77-C-4688) to Air Cargo Research Institute of Philadelphia to compare actual air and surface costs. The study covered shipments specifically from the Norfolk area to Spain; Jacksonville, Florida; and San Francisco, California.

The study concluded that the use of containerized scheduled commercial air freight service offered significant advantages. For example, on shipments from Norfolk to the San Francisco area, the report indicated that using airlift on some shipments would (1) offer cost savings over the present modes being used--parcel post, small package carriers, and motor carrier service, (2) provide better customer satisfaction by decreasing the time needed for delivery, (3) provide better control over shipments, particularly those sent by parcel post, and (4) enhance overall supply system reliability. The study recommended that its findings be presented to officials at the Naval Supply Center in Norfolk, the Navy Material Transportation Office in Norfolk, and the Navy Supply Systems Command in Washington, D.C. As of this date, the Navy has not completed its review. We are asking the Navy to keep us informed of its progress.

A recent congressional action, which we believe will be of interest to you on this matter, has taken a reverse point of view from that of the Navy's consultant. In the House and Senate conferees' report on the Defense appropriation bill for fiscal year 1979 (H.R. 13635, House Report 95-1764), an exception was taken to the Navy's and Air Force's reliance on commercial airlift for shipments within the United States during peacetime. The conferees deleted $11 million from DOD's requests for operating the QUICKTRANS and LOGAIR systems. On the other hand, they added $16 million to increase the number and types of spare parts and components locally available to military units.

The House Committee on Appropriations pushed for this reduction in airlift use. The Committee stated that judicious use of air delivery within the continental United States, carrying only the most essential and critical items, with an additional investment in spare parts, would produce cost savings and improve combat readiness.

We trust that this information will satisfy your constituent's concern on these matters. As agreed with your office, copies of this letter are being sent to the Secretary of the Navy and other interested parties.

Sincerely yours,

for R. W. Gutmann
Director

Enclosures - 2

ENCLOSURE I

MILITARY CARGO ORIGINATING IN THE NORFOLK, VIRGINIA, AREA

COMMERCIAL AIR FREIGHT VERSUS LESS-THAN-TRUCKLOAD (note a)

DECEMBER 1977, JANUARY 1978, FEBRUARY 1978

Destination	Commercial air freight					Less-than-truckload					Average weight per week	Average number shipments per week
	Shipments	Weight		Cost		Shipment	Weight		Cost			
		Total	Average	Total	Average lb.		Total	Average	Total	Average lb.		
Northeast States:												
Maine	28	2,062	74	$1,397	$0.68	127	160,001	1,260	$12,220	$0.08	12,308	10
New Hampshire	6	243	41	231	.95	12	7,903	659	604	.08	608	1
Vermont	-	-	-	-	-	4	4,986	1,247	388	.08	384	-
Rhode Island	5	133	27	127	.95	45	92,017	2,045	4,638	.05	7,078	3
Massachusetts	22	1,225	56	710	.58	75	45,099	601	4,851	.11	3,469	6
Connecticut	82	3,375	41	2,353	.70	123	128,390	1,044	9,303	.07	9,876	9
Total	143	7,038	49	$4,818	$0.68	386	438,396	1,136	$32,004	$0.07	33,723	30
Middle Atlantic States:												
New York	125	13,035	104	$4,314	$0.33	270	195,911	726	$17,437	$0.09	15,070	21
New Jersey	16	1,286	80	379	.29	211	220,117	1,043	14,585	.07	16,932	16
Pennsylvania	59	3,559	60	1,733	.49	212	211,108	996	14,412	.07	16,239	16
Maryland	33	1,803	55	935	.52	198	187,883	949	11,379	.06	14,453	15
Delaware	-	-	-	-	-	18	12,755	709	852	.07	981	1
District of Columbia	24	914	38	601	.66	53	40,486	764	3,755	.09	3,114	4
Virginia	28	2,496	89	660	.26	295	397,189	1,346	39,378	.10	30,553	23
Total	285	23,093	81	$8,622	$0.37	1,257	1,265,449	1,007	$101,798	$0.08	97,342	97

ENCLOSURE I

ENCLOSURE 1

MILITARY CARGO ORIGINATING IN THE NORFOLK, VIRGINIA, AREA

COMMERCIAL AIR FREIGHT VERSUS LESS-THAN-TRUCKLOAD (note a)

DECEMBER 1977, JANUARY 1978, FEBRUARY 1978

Destination	Commercial air freight					Less-than-truckload						
	Shipments	Weight		Cost		Shipment	Weight		Cost		Average weight per week	Average number shipments per week
Southeastern States:		Total	Average	Total	Average lb.		Total	Average	Total	Average lb.		
North Carolina	4	523	131	$ 108	$0.21	159	251,295	1,580	$29,374	$0.12	19,330	12
South Carolina	20	1,896	95	1,281	.68	137	177,122	1,293	6,319	.04	13,625	11
Georgia	36	2,325	65	1,152	.50	131	100,650	768	4,900	.05	8,188	10
Flordia	81	5,260	65	2,393	.45	380	509,464	1,341	33,396	.07	39,190	29
Alabama	25	1,275	51	923	.72	42	34,266	816	2,113	.06	2,636	3
Mississippi	27	1,157	43	1,081	.93	93	105,876	1,138	11,079	.10	8,144	7
Tennessee	1	433	62	275	.64	63	57,721	916	3,175	.06	4,440	5
Total	200	12,869	64	$7,213	$0.56	1,005	1,236,394	1,230	$90,356	$0.07	95,107	95
Mideast States:												
Ohio	49	4,736	97	$2,086	$0.44	92	62,961	684	$ 5,352	$0.09	4,843	7
Indiana	4	339	85	162	.48	76	68,690	904	7,651	.11	5,284	6
Michigan	20	2,612	131	1,273	.49	40	32,472	812	3,731	.11	2,498	3
Kentucky	14	1,516	108	488	.32	60	94,587	1,576	6,967	.07	7,276	5
West Virginia	1	52	52	33	.63	29	13,836	477	1,282	.09	1,064	2
Total	88	9,255	105	$4,042	$0.44	297	272,546	918	$24,987	$0.09	20,965	23

ENCLOSURE 1

ENCLOSURE I

MILITARY CARGO ORIGINATING IN THE NORFOLK, VIRGINIA, AREA

COMMERCIAL AIR FREIGHT VERSUS LESS-THAN-TRUCKLOAD (note a)

DECEMBER 1977, JANUARY 1978, FEBRUARY 1978

Destination	Commercial air freight					Less-than-truckload						
	Shipments	Weight		Cost		Shipment	Weight		Cost		Average weight per week	Average number shipments per week
Midwest States:		Total	Average	Total	Average lb.		Total	Average	Total	Average lb.		
Illinois	30	3,910	130	$1,716	50.44	102	122,382	1,200	$14,792	$0.12	9,414	8
Wisconsin	4	209	52	174	.83	25	22,849	914	2,116	.09	1,757	2
Minnesota	23	3,145	137	1,743	.55	17	7,312	430	1,132	.15	562	1
Iowa	18	1,282	71	756	.59	10	1,637	164	335	.20	126	1
Missouri	18	1,283	71	876	.68	22	20,272	921	2,285	.11	1,559	2
Total	93	9,829	106	$5,265	$0.54	176	174,452	991	$20,660	$0.12	13,419	14
Southwest States:												
Texas	52	4,005	77	$2,727	$0.68	242	189,628	784	$25,081	$0.13	14,587	19
Louisiana	33	4,573	139	2,855	.62	54	37,780	700	3,810	.10	2,906	4
Arkansas	7	247	35	331	1.34	13	9,262	712	928	.10	712	1
Oklahoma	23	2,133	93	1,513	.71	70	65,675	938	7,331	.11	5,052	5
New Mexico	10	583	58	591	1.01	39	21,904	562	3,096	.14	1,685	3
Total	125	11,541	92	$8,017	$0.69	418	324,249	776	$40,246	$0.12	24,942	32

ENCLOSURE I

MILITARY CARGO ORIGINATING IN THE NORFOLK, VIRGINIA, AREA

COMMERCIAL AIR FREIGHT VERSUS LESS-THAN-TRUCKLOAD (note a)

DECEMBER 1977, JANUARY 1978, FEBRUARY 1978

Destination	Commercial air freight					Less-than-truckload						
	Shipments	Weight		Cost		Shipment	Weight		Cost		Average weight per week	Average number shipments per week
		Total	Average	Total	Average lb.		Total	Average	Total	Average lb.		
Mountain Plains States:												
Colorado	9	679	75	$627	$0.92	15	7,301	487	$1,176	$0.16	562	1
Utah	20	2,084	104	1,306	.63	24	18,560	773	2,941	.16	1,428	2
Wyoming	1	5	5	31	6.20	2	1,033	517	174	.17	79	-
Montana	-	-	-	-	-	3	1,645	548	270	.16	127	-
Idaho	11	501	46	486	.97	11	15,492	1,408	1,902	.12	1,192	1
North Dakota	4	83	21	134	1.61	15	15,820	1,055	3,463	.22	1,217	1
South Dakota	1	4	4	27	6.75	2	400	200	108	.27	31	-
Nebraska	2	8	4	29	3.63	4	2,137	534	308	.14	164	-
Kansas	5	219	44	203	.93	15	7,713	514	1,083	.14	593	1
Total	53	3,583	68	$2,843	$0.79	91	70,101	770	$11,425	$0.16	5,392	7
Far West States:												
California	130	172,760	1,329	$80,059	$0.46	228	432,575	1,897	$69,778	$0.16	33,275	18
Nevada	2	68	34	68	1.00	15	9,047	603	1,990	.22	696	1
Arizona	5	210	42	213	1.01	12	11,998	1,000	1,484	.12	923	1
Total	137	173,038	1,263	$80,340	$0.46	255	453,620	1,779	$73,252	$0.16	34,894	20

ENCLOSURE I

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MILITARY CARGO ORIGINATING IN THE NORFOLK, VIRGINIA, AREA

COMMERCIAL AIR FREIGHT VERSUS LESS-THAN-TRUCKLOAD (note a)

DECEMBER 1977, JANUARY 1978, FEBRUARY 1978

Destination	Commercial air freight					Less-than-truckload						
Northwest States:	Shipments	Weight Total	Weight Average	Cost Total	Cost Average lb.	Shipment	Weight Total	Weight Average	Cost Total	Cost Average lb.	Average weight per week	Average number shipments per week
Washington	10	199	20	$ 352	$ 1.77	38	32,396	853	$8,270	$0.26	2,492	1
Oregon	9	409	45	415	1.01	2	457	229	66	.14	35	-
Total	19	608	32	$767	1.26	40	32,853	821	$8,336	.25	2,527	1
GRAND TOTAL	1,143	250,854	219	$121,927	$0.49	3,925	4,268,060	1,087	$403,064	$0.09	328,312	302

a/Less-than-truckload includes only shipments under 10,000

Source: Military Traffic Management Command, Bailey's Crossroads, Va.
"Data Management System" tapes for months of December 1977/January 1978/ February 1978

ENCLOSURE I

ENCLOSURE II

AVERAGE MONTHLY CARGO SHIPPED VIA THE NAVY'S QUICKTRANS SYSTEM FROM THE NAVAL AIR STATION, NORFOLK, TO SELECTED DESTINATIONS

Destination QUICKTRANS terminal	Monthly average (pounds) Totals	Subtotals
Dover AFB, Del.:	302,600	-
On-line (Dover)	-	69,200
Off-line via truck:		
McGuire AFB, N.J.	-	31,400
Philadelphia, Pa.	-	82,200
New London, Conn.	-	58,400
Quonset Point, R.I.	-	7,200
Boston, Mass.	-	54,200
Charleston, S.C.:	212,400	-
On-line (Charleston)	-	212,400
Jacksonville, Fla.:	290,400	-
On-line (Jacksonville NAS)	-	242,400
Off-line via truck:		
Pensacola NAS, Fla.	-	48,000
Patrick AFB, Fla:	10,800	-
On-line (Patrick)	-	10,800
Key West, Fla.:	7,200	-
On-line (Key West NAS)	-	7,200
Indianapolis, Ind.:	11,600	-
On-line (Indianapolis)	-	11,600
San Diego, California:	292,000	-
On-line (North Island NAS)	-	204,200
Off-line via truck:		
Long Beach, Calif.	-	66,000
Pt. Mugu, Calif.	-	21,800
Travis AFB, Calif.:	206,800	-
On-line (Travis)	-	166,600
Off-line via truck:		
Oakland NSC	-	34,800
Lemoore NAS	-	5,400
McChord AFB, Wash.:	92,600	-
On-line (McChord)	-	40,600
Off-line via truck:		
Bremerton, Wash.	-	39,200
Whitbey Island NAS, Wash.	-	12,800
Total	1,426,400	-
Total:		
On-line	-	965,000
Off-line via truck	-	461,400

Source: Navy Material Transportation Office, Norfolk, Va. "Origin Cargo Distribution Report," month of March 78--Year-to-Date Average