



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION V

1450 MARIA LANE  
WALNUT CREEK, CALIFORNIA 94596-5368

MAR - 7 1992

Docket No.: 15000004

McDonnell Douglas Corporation  
Douglas Aircraft Company  
3855 Lakewood Blvd.  
Long Beach, California 90846-0001

Attention: Gerald W. Lancour, General Manager  
Safety, Health and Environmental Affairs

Thank you for your letter dated February 28, 1992 informing us of the steps you have taken to correct items which we brought to your attention in our letter dated December 24, 1991.

Your cooperation with us is appreciated.

Sincerely,

Robert J. Pate, Chief  
Nuclear Materials and  
Fuel Fabrication Branch

9302190062 920309  
PDR STPRG ESQCA  
PDR

11  
FE07

MAR - 9 1992

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Robert J. Pate, Chief  
Nuclear Materials and  
Fuel Fabrication Branch

bcc w/copy of letter dated February 28, 1992:

Docket File  
Inspection File  
G. Cook  
R. Huey  
B. Faulkenberry  
J. Martin  
J. Zollicoffer  
State of California

bcc w/o copy of letter dated February 28, 1992:

M. Smith

Region V/ann

~~K. Prendergrast~~

~~R. Pate~~

3/6/92

3/7/92

REQUEST COPY	REQUEST COPY	SEND TO PDR
YES / NO	YES / NO	YES / NO

Douglas Aircraft Company

RECEIVED  
NRC  
REGION V

MCDONNELL DOUGLAS

February 28, 1992

1992 MAR -3 AM 11: 21

United States Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555

Re: Douglas Aircraft Company, Reply to Notice of Violation  
Docket No. 15000004

Dear Document Control Officer:

This will serve to respond to the above Notice of Violation (NOV). As requested, we outline the reasons for the violations, corrective steps taken and results achieved, as well as steps to be taken to prevent similar situations in the future and the date by which full compliance is achieved.

Please note that although the NOV identifies a number of violations, all of them resulted from a single event. Namely, the failure to follow existing procedures for the purchase and handling of radioactive materials. For this reason, the discussion that follows addresses the noted violations together.

#### Reason For The Violation

As stated above, the violations in question were caused by a failure to adhere to the requirements of our radiation safety program. The Douglas Aircraft Company's (DAC) Radiation Safety Program is established in our Safety Manual (Standard Process System (SPS) 062). Section 25 of this Manual, entitled "Ionizing Radiation - Radioactive Materials and X-Ray Operations", incorporates procedures and requirements for the purchase and handling of radioactive materials. Among others, Section 25 requires that all requests for purchase of radioactive materials be submitted to the Company's Radiation Safety Committee for approval. Section 25 also controls the storage of radioactive materials and requires that only authorized and trained individuals handle these materials. Due to an oversight when the tritium drogue lights were purchased, the procedures set forth in the referred Manual were not followed. Adherence to this internal process would have ensured compliance with the cited NRC regulations.

#### Corrective Steps Taken

To correct the noted violations, the Company's KC-10 Program has modified the design of the drogue assembly to eliminate the requirement for tritium lights. The Company's customer, the

9203060036

Douglas Aircraft Company

RECEIVED  
NRC  
REGION V

MCDONNELL DOUGLAS

February 28, 1992

1992 MAR -3 AM 11:21

United States Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555

Re: Douglas Aircraft Company, Reply to Notice of Violation  
Docket No. 15000004

Dear Document Control Officer:

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#### Corrective Steps Taken

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9203060036

United States Air Force, has approved the design modifications. At this point, the tritium lights are no longer an integral component of the drogue. The lights have been deemed surplus with no further function within the DAC KC-10 Program. The lights have been accounted for, collected, packaged, and returned to England under an NRC general license to export (10 CFR 110.23 (a) (2)). The enclosed documentation verifies the exportation to the original vendor.

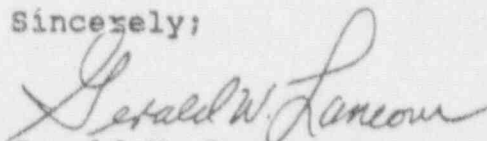
#### Steps Taken to Prevent Future Violations

A number of steps have been taken to improve the effectiveness of our overall management control system to prevent a recurrence of this situation. Among other, meetings have been held with the relevant Departments to discuss this matter and identify any "loopholes" in the system as well as needed corrective action. As a result, DAC's Supplier Management Division has been formally advised of the situation and it has been requested that the provision of Section 25 be incorporated into their internal buying procedures. In addition, the Packaging Engineering (receiving) Department has been advised to review and modify their operating instructions to ensure the proper notifications as specified in Section 25.

#### Date of Full Compliance

Full compliance has already been achieved through the design modification discussed above and by returning the lights to the vendor in England.

Sincerely;



Gerald W. Lancour  
General Manager  
Safety, Health &  
Environmental Affairs

Enclosure

cc: Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region V  
1450 Maria Lane  
Walnut Creek, CA 94596-5368

Robert Pate, Chief  
Nuclear Materials and Fuel Fabrication Branch  
U.S. Nuclear Regulatory Commission  
Region V  
1450 Maria Lane  
Walnut Creek, CA 94596-5368

1001

Shipper's Name and Address <b>MCDONNELL DOUGLAS CORPORATION 3855 LAKEWOOD BOULEVARD DEPT. C1-152 MC52-37 LONG BEACH CA 90846 US</b>		Shipper's Account Number <b>Not Used</b>		Air Waybill <b>Issued by BRITISH AIRWAYS P.O. BOX 10</b>	
Consignee's Name and Address <b>FLIGHT REFUELING LTD BROOKS RD WIMBORNE DORSET BH21 2BJ ENGLAND</b>		Consignee's Account Number <b>Not Used</b>		It is agreed that the goods described herein are accepted in apparent good order and condition (except as noted) for carriage SUBJECT TO THE CONDITIONS OF CONTRACT ON THE REVERSE HEREOF. THE SHIPPER'S ATTENTION IS DRAWN TO THE NOTICE CONCERNING CARRIER'S LIMITATION OF LIABILITY. Shipper may increase such limitation of liability by declaring a higher value for the goods. <b>MEMBER OF IATA: IT IS AGREED THAT CLAIM FOR OVERCHARGES MUST BE MADE IN WRITING TO CARRIER IN 180 DAYS OF ISSUE DATE.</b>	
Issuing Carrier's Agent Name and City <b>SCHENKERS INTERNATIONAL 500 N. NASH STREET CA 90245</b>		Notify: <b>SCHENKES LTD HEATHROW AIRPORT LONDON</b>  <b>16150570238.1</b>			
Agent's IATA Code <b>33-8-4477</b>		Account No.			
Origin of Departure (Last of first Carrier and required Routing) <b>LOS ANGELES</b>					
By first Carrier <b>LHR</b>		By first Carrier <b>BRI</b>		By first Carrier <b>ASH AIRWAYS</b>	
Currency <b>USD</b>		Currency <b>PI</b>		Currency <b>P</b>	
Declared Value for Carriage <b>NVI</b>		Declared Value for Customs <b>49000.00</b>			
Airport of Origin <b>HEATHROW</b>		Flight Date <b>BA282/15</b>		Amount of Insurance <b>NVI</b>	
Handling Information: Shipper #6157022 P/S615702-2 C116200 <b>RADIOACTIVE MATERIAL EXCEPTED PACKAGE, INSTRUMENTS UN 2910</b>					
These commodities licensed by the U.S. for ultimate destination <b>U.K.</b> Divers on contrary to U.S. law prohibited.					
No. of Pieces <b>1</b>	Gross Weight <b>70.00</b>	Rate Class <b>70.00</b>	Commodity Item No.	Chargeable Weight <b>70.00</b>	Rate <b>70.00</b>
ASSEMBLIES & RAW MATERIAL		PARADROQUE (TRITIUM BETA LIGHTS)		KC-10 PARTS, COMPONENTS GROUND SUPPORT EQPMNT (GSE) TOOLS, TOOLING & SPECIAL TEST EQPMNT (1X17X17X51)	
1		70.00		70.00	
Prepaid		Weight Charge		Other Charges	
70.00		Valuation Charge			
Total other Charges Due Agent		Shipper certifies that the particulars of the facts herein are correct and that the goods are in proper condition for carriage by air according to the applicable Dangerous Goods Regulations.			
Total other Charges Due Carrier		<b>SCHENKERS INTERNATIONAL</b> Signature of Shipper or its Agent			
Total prepaid		<b>15 FEB 92 EL SEGUNDO, CA</b>			
Total collect		<b>AWB # 12302841156</b>			
Currency Conversion Rates		Executed on _____ at _____ (Place) Signature of Issuing Carrier or its Agent			
Per Carrier's Use only		Charges in Destination			

SHIP  
TOFLIGHT REFUELING LTD.  
BROOKS ROAD  
WIMBORNE, DORSET BH21 2BJ  
ENGLAND, UNITED KINGDOM

NONP SHIP

P. S. NO. 615/UZ-2  
BOX NO. 1 Carton  
GROSS WT. 7 # (3.175 Kg)  
NET WT. 12"X12"X3"  
S/L NO.DATE  
SHIPPED February 13, 1992

ITEM NO	PART NUMBER AND DESCRIPTION	QUANTITY SHIPPED	UNIT LIST PRICE	PER	EXTENDED LIST PRICE
1.	P/N FRS850003 / PARADROGUE / KC-10 AIRCRAFT PART  H. S. CODE # 8803.30.0050 5  EXPORTED UNDER THE AUTHORITY OF STATE DEPARTMENT LICENSE: 453149 EXPIRES: 4-10-93  "THIS MATERIAL IS EXPORTED UNDER A NUCLEAR REGULATORY COMMISSION GENERAL LICENSE IN ACCORDANCE WITH 10 CFR 110.23(a)(2)."  ATTENTION FLIGHT REFUELING: Paratrogues (Tritium Beta Lights...) were originally sent to Douglas Aircraft Company installed on the aircraft's paratrogues. Douglas Aircraft's KC-10 Program Office intends to export additional Paratrogues to Flight Refueling Ltd., Please DO NOT RETURN THEM OR THE ONES BEING EXPORTED HEREIN.  COUNTRY OF ORIGIN: UNITED KINGDOM	7 each	\$7,000	00 EA	NO CHARGE

"THESE COMMODITIES ARE AUTHORIZED BY THE U. S. GOVERNMENT FOR EXPORT ONLY TO UNITED KINGDOM. THEY MAY NOT BE RESOLD, DIVERTED, TRANSFERRED, RE-APPLIED OR OTHERWISE BE DISPOSED OF IN ANY OTHER COUNTRY, EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED THROUGH AN INTERMEDIATE PROCESS INTO OTHER END-ITEMS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE U.S. DEPARTMENT OF STATE."

THE ABOVE MATERIAL IS THE PRODUCT AND MANUFACTURE OF THE UNITED STATES OF AMERICA UNLESS OTHERWISE NOTED.

THESE COMMODITIES LICENSED BY U.S. FOR ULTIMATE DESTINATION: UNITED KINGDOM

DIVERSION CONTRARY TO U.S. LAW PROHIBITED. STATEMENT APPEARING ON REVERSE SIDE APPLIES.

FOR DC-3, DC-4, DC-6, DC-7, DC-8, DC-9, DC-10 TYPE COMMERCIAL AIRCRAFT.

GROSS TOTAL  
- DISCOUNT  
TOTAL NO CHARGEADD'L  
MARKS  
AND  
SHIPPING  
NOTES

S.O. NO CCN: DPMOLAAO

TAX CODE	ACCOUNT NO.	AMOUNT

VALUE FOR CUSTOMS: \$ 49,000.00 USD

DOUGLAS AIRCRAFT COMPANY

3885 LAKEWOOD BOULEVARD LONG BEACH, CALIFORNIA 90801

DAC 45-2 (REV. 12-88)

(Uniform Domestic Freight Bill of Lading, adopted by Carrier in Official Southern Railway and Transport Commission Conference, March 11, 1971, as amended August 1, 1980, and June 11, 1981.)

 Shipper's B/L No. **C 8199**  
 C81998

 Shipper's Packing Sheet No. **610413-**

Shop Order No.

Sales Order No.

Charge Acct. No.

Customer's Contract No.

# UNIFORM STRAIGHT BILL OF LADING ORIGINAL—NOT NEGOTIABLE

SCHENKERS INTERNATIONAL

COMPANY

Received, subject to the classifications and tariffs in effect on date of receipt by the carrier of property described in Original Bill of Lading

 3855 LAKEWOOD BLVD. BLDG. 56  
 At LONG BEACH, CALIFORNIA 90846 Date 02-20 19 92 from DOUGLAS AIRCRAFT COMPANY

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown), marked, consigned, and delivered as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in process of the property under the contract) agrees to carry to its usual place of delivery at said destination, or as its own road, or its own water line, otherwise deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier, all of any of said property over all of any portion of its route to destination, and as to each party at any time interested in all of any of said property, that every service to be performed hereunder shall be subject to the conditions not prohibited by law, whether printed or written herein contained, including the conditions on back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

(NAME OF STREET ADDRESS OF CONSIGNEE—FOR PURPOSES OF NOTIFICATION ONLY.)

Consigned to FLIGHT REFUELING LIMITED  
 BROOKS ROAD  
 Destination WIMBORNE, DORSET BH21 2BJ State of County of  
 ENGLAND, UNITED KINGDOM  
 Route ATTN: D. STEVENS/CUSTOMER SUPPORT  
 VIA: SCHENKERS INTERNATIONAL

Delivering Carrier

Car Initials

Car No.

No. Packages	DESCRIPTION OF ARTICLE, SPECIAL MARKS, AND EXCEPTIONS	Weight (Subject to Correction)	CLASS OR RATE	CHECK COLUMN	Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignee, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.  Douglas Aircraft Company  Per _____ Signature of Consignor  If charges are to be prepaid, write or stamp here, "To be Prepaid."  "TO BE PREPAID"  This Shipment is correctly described.  Correct weight is _____ lbs. Subject to verification by the Trans-Continental Freight Bureau According to Agreement No. _____ Douglas Aircraft Company
2 BOX. 1 CTN	P/S: 610413-2 CCN: DPBA1135  EXPORTED UNDER THE AUTHORITY OF STATE LICENSE: 453149 EXPIRES 04-10-93. "THIS MATERIAL IS EXPORTED UNDER A NUCLEAR REGULATORY COMMISSION GENERAL LICENSE IN ACCORDANCE WITH 10 CFR 110.23 (A) (2)."	133#			

\*) If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight."

NOTE:—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.  
 The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \_\_\_\_\_ per \_\_\_\_\_

Douglas Aircraft Company



Sold To

Ship To

FLIGHT REFUELING LIMITED  
 BROOKS ROAD  
 WIMBORNE, DORSET BH21 2BJ  
 ENGLAND, UNITED KINGDOM  
 ATTN: B. STEVENS/CUSTOMER SUPPORT

ATTN:

CUSTOMER CODE

S/T= PRI=1A

INVOICE NO.

\*\*MISCELLANEOUS SHIPMENTS\*\*

INVOICE DATE

FORM=RFS

REF-NO=00540

PURCHASE ORD NO.

FUSL-NO=

SEG-ID=

B/L NO.

BAG-TAG-NO=E74482

CCN=DPRA1135

P/S-NO=01113-2

SHIP DATE 19/02/92

REVIEW BY= RMQ

SOE

HOW SHIP AFP

FRR=

I R FREEHAN

C17390

RESALE

TAX PERMIT NO.

FOB PORT OF ORIGIN DESTINATION

PACKING NUMBER	P/O ITEM	PART NUMBER	KEYWORD	QUANTITY	UNIT PRICE	UN	EXTENDED PRICE IN U.S. DOLLARS
		ATTENTION FLIGHT REFUELING: Paratroques (Tritium Beta Light. . .) were originally sent to Douglas Aircraft Company installed on the aircraft's paratroques. Douglas Aircraft's KC-10 Program Office intends to export additional Paratroques to Flight Refueling Ltd., Please Do Not Return Them or The Ones Being Exported Herein.					
		Country of Origin: United Kingdom					
		VALUE FOR CUSTOMS: \$20,000.00					

TAX CODE

ACCOUNT

CCN NO

The above material is the product and manufacture of the  
 United States of America unless otherwise noted. Made in UNITED KINGDOM

TOTAL NO-CHARGE

For DC-3, DC-4, DC-6, DC-7, DC-8, DC-9, DC-10 type commercial aircraft.

These commodities licensed by U.S. for ultimate destination UNITED KINGDOM

Diversion contrary to U.S. law prohibited. Statement appearing on reverse side of this invoice applies.

CITY TAX  
 COUNTY TAX  
 STATE TAX  
 TRANSPORTATION  
 EXP. HAN. CHG.

TOTAL

SHIPPING MARKS	TOT-CON	QTY	TYPE	GR WT	NET WT	LEN	WID	HT	CUBIC
3		1	CTB	3		12	10	8	.6
		2	BOX	65		22	22	24	5.8