BOARD OF INQUIRY CONVENED AT ROYAL AIR FORCE BRUGGEN AT 1430 HOURS ON 3 MAY 1984

NARRATIVE OF EVENTS

1. As part of a Routine Logistical Flight (RLF) on 2 May 1984 to RAF Brugge, a number of containerised weapons were transferred from the aircraft by road, secured correctly to gravity roller equipped weapon trolleys (Type SA) and towed by a Landrover vehicle.

2. The containerised weapons were delivered to the Weapons Servicing Building (331) on the South side of the Supplementary Storage Area (SSA) where they were either placed on the floor or transferred to a flat topped SA trolley by a team of airmen under the command of Sergeant .

3. Corporal and Junior Technician were detailed by Sergeant to move a weapon in a container (CDF/CR 124), on a flat topped SA trolley (254) and towed by a Landrover vehicle (17 KA 4) to a storage building (328) on the North side of the SSA. The container was not secured to the trolley as required in 6D 80/4 and detailed in AP 1100H-060.

4. At approximately 1920 hours, whilst negotiating a 180 degree bend at the Eastern end of the SSA at a slow speed, the containerised weapon slipped off the trolley, struck the road and from its final position appeared to have rolled axially through 270 degrees. Both container and weapon sustained damage.

5. Following this incident, after precautions had been taken to safeguard both the weapon and personnel involved, the container and weapon were returned to Building 331 on 7 May 1984.

6. Later, both the container and the weapon's unserviceability were confirmed by the AWRE EOD team.
CIRCUMSTANCES

1. The Board finds that, at RAF Bruggen on 2 May 84, a number of containerised weapons were delivered on a Routine Logistics Flight (RLF). The Ground Safety Officer (GSO), Flight Lieutenant , supervised the off-loading of the containerised weapons and their delivery to the Supplementary Storage Area (SSA). Within the SSA the Site Controller, Chief Technician , located in the SSA Control, monitored the movement of containerised weapons in accordance with a plan which he had previously prepared.

2. The containerised weapons, secured to Type SA Weapon Trolleys fitted with gravity rollers, were towed by a Landrover, driven by Junior Technician with Sergeant , acting as escort, from the aircraft to the garages adjacent to Building 327 within the SSA. Corporal with Junior Technician was as escort, then towed the SA Trolleys from the garages to the Weapon Servicing Building (Building 331) at the South side of the SSA.

3. At Building 331 a team of airmen under the command of Sergeant transferred the containerised weapons from the SA Trolleys fitted with gravity rollers either to the floor of Building 331 or, in accordance with a plan previously agreed with the Site Controller, directly on to flat-top SA Trolleys not equipped with gravity rollers.

4. When the penultimate container had been delivered to Building 331, Cpl and Jnr Tech were detailed by Sgt to tow a flat-top SA Trolley and the containerised weapon upon it to storage building No 328 on the North side of the SSA. The container was not secured to the SA Trolley by a Restraining Kit (76 DR 109) as required by 30 D14 (3rd Edition) Leaflet F11 paragraph 16 and detailed in AP 11001-0605-5 Sect 3 Chap 5. Cpl carried out a visual inspection of the trolley ensuring that there were no obvious defects and that the container was square on the trolley. Jnr Tech reversed the Landrover onto the towing arm of the trolley and Cpl made the necessary connections between the Landrover and trolley. At the time it was raining slightly and the weather was gradually deteriorating. Cpl stated that he had carried out similar operations under worse weather conditions.

5. With Jnr Tech driving and Cpl in the Landrover as escort, they drove slowly away from Building 331 in an Easterly direction. Jnr Tech selected second gear in the Landrover and proceeded at a speed estimated at between 10 and 15 km towards the Eastern end of the SSA along the road in front of Buildings 332-339. Jnr Tech slowed down slightly before the bend in the road at the Eastern end of the SSA.
6. Jnr Tech had driven the route, towing loaded SA trolleys, on previous occasions but not when transporting a container. At 1920 hours local and whilst negotiating the 180 degree bend at Eastern end of the SSA, at a point some 7 of the way around the bend, Jnr Tech felt the trolley move. Looking in the rear-view mirror, he saw the front of the container move, straightened the Landrover in an attempt to bring the trolley under the container, without success. The container slid from the trolley, struck the road and from its final position appeared to have rolled axially through 270 degrees.

7. The incident was reported by Cpl to the Site Controller, action was taken to safeguard the weapon, container and personnel. After action by the Special Safety Team (SST) and Weapon System Load Specialist (WSLS), and under the direction of RNAREG Weapon Engineering Staff, the container was opened and its contents superficially examined. The container was closed and moved to Building 331 where a further survey indicated a need for a deeper specialist examination. An EOD team from AWRE subsequently confirmed the unserviceability of the weapon and container.

8. The authorized method of securing containers to SA Trolleys, in accordance with AP 1104-0605-5 Section 3 Chapter 5, requires the use of Kits Restraining (76 DR/109). One kit is required to secure a single container to a trolley. The number of Kits Restraining authorised by scale for RAF Bruggen is quantity 2.

9. At the time of the incident the SSA held 4 kits on charge, all of which were serviceable. The Board has taken evidence from a number of witnesses, who thought there was a shortage of restraint kits, to the effect that they felt that the mandatory requirements to secure containers to SA Trolleys for all movements of trolleys could only be met in part, is only for those trolleys fitted with gravity rollers which were used exclusively for the transit of containers from the RAF aircraft to the SSA. Witnesses from RAF Bruggen with responsibility for ensuring the application of the mandatory requirements contained in SD 814, drew the Board's attention to correspondence in which they had applied for an increase in their scale entitlement of Kits Restraining to a total of 2. They claimed that this increase was essential to meet the mandatory requirements at peak loading times during ARLs.
10. Whilst the Board appreciated that their case was supported by RQWCO and MOD, the Board finds that the number of Restrainting KIts required to transport the containers from the aircraft to the SSA was 2; this left 2 serviceable Kits which could have been used to secure the containers during their transit from Building 351 to Building 326. It had been decided by the SSA staff that one set of restraining Kit should be used as a spare and split between the 2 SSA Trolleys being used to transport containers from the aircraft to the SSA. The Board questions this decision and considers that kit could and should have been used to secure the containers being moved within the SSA.

11. The Board finds that no one at H.P. Brugge, responsible for ensuring the safe transportation of the containers and weapons within the SSA, attempted to use or direct the use of the remaining 2 Restrainting Kits to meet the known mandatory requirements of SD 814, and thereby prevent the incident and the resultant damage to the container and weapons. Moreover, the Board finds that, notwithstanding the correspondence referring to a lack of Restrainting Kits, the fact that unsecured containers were being moved regularly within the SSA was never brought to the attention of higher authority.

12. The schedule for loading a container onto a SA Trolley is contained in AP110P-0635-5 Sect 3 Chap 5. Each page of this schedule is marked 'Approved Information' and refers to a warning at the front of the AP. The warning states that the schedule is subject to a MOD ruling that related information and instructions must be examined in detail for technical accuracy and compliance with safety requirements before they may be released as documents formally approved for application to equipment intended for use with live stores. The warning continues 'Approved material must not be altered or depart from, except under the authority of an accreditation list to the publication or an instruction which has been formally approved to the requirements of the MOD'.

13. The Board finds that there was no justification for failing to comply with the mandatory requirement to secure containers to SA Trolleys nor was there any directive from the MOD that the loading schedule could be deviated from. From the evidence it is apparent that no one person within the Ammunition Engineering Squadron made any determined effort to resolve the confusion surrounding the number of serviceable Restrainting Kits. A casual of the relevant documents alone would have shown that at no time since Jan 33 had there ever been less than 4 serviceable kits. However, the Board, has, knowledge, in mitigation, that there is...
14. The Board was unable to produce specific evidence as to the actual cause of the incident. The Landrover towing the trolley was seen to be travelling at slow speed that witnesses considered comparable with previous operations. At the time of the incident it was raining and it had been raining for sometime before. The trolley and trolley were wet and, as the trolley rounded the corner, the container must have been subject to centrifugal force. The Board could not disregard the fact that the rain could have reduced the friction between the trolley and the container. The Board inspected the incident site and could not discern any significant order in the road, but the corner does tighten up after the apex. Moreover, on many previous occasions and over some considerable period of time unsecured containers have been towed within the SSA. Also, the route taken by Intex had been used before by at least one other driver who claims to tow unsecured containers at a speed just above stalling in second gear, he estimated this to be between 5 and 6 mph. The Board conducted a test which confirmed that, under similar conditions to those pertaining at the time of the incident, the stalling speed, in second gear, of a Landrover with a similar load was between 5 and 10 mph. Unsecured containers had been moved under worse weather conditions. The Board finds that the major contributory factor for the cause of the incident was the lack of mandatory restraint placed upon the container.

15. The Board finds that there were no fatigue implications associated with the driver's activities in the previous 3 days.

16. The Board finds that all involved personnel were on duty at the time of the incident.

17. The Board finds that all in use equipment was serviceable at the time of the incident and that...
before-use servicing had been correctly recorded.

ORDERS AND INSTRUCTIONS

12. The Board finds that the following orders and instructions were in issue:

a. SD 814 Leaflet F11
b. 86 Service Orders Part 3 Sect 3-6-2
b. AP 1108-0605-5 Sect 3 Chap 5

c. Engineering Wing MT Orders RAP Brugge-
   Part 5 Sect 1 Order 2

d. JCP 551 MT Driver's Handbook

e. Supplement to Part 5 Section 3 of 86
   Service Orders Amend:
   (1) 8
   (2) 6
   (3) 5
   (4) J
   (5) V

The Board finds that the following orders and instructions were not being complied with:

f. SD 814 (2nd Edition) Leaflet F11

g. IFC 86 Part 3 Sect 3-6-2 Para 10

h. AP 1108-0605-5 Sect 3 Chap 5

i. JCP 551 Part 1 Para 1g

j. The relevant elements of Supplement to Part
   5 of UCOs Amend A, B and J

ARRANGEMENTS FOR FENCE TO SAFEGUARD EQUIPMENT

13. The Board finds that, at the time of the incident, the regulatational arrangements in force to safeguard equipment were adequate and as detailed above. The personnel involved were required to comply with the regulations contained in the orders and instructions in force. However, those concerned did not comply with the mandatory requirements in SD 814 and

AP 1108-0605-5. Sgt claims to have briefed the driver and escort to be careful and the escort, Cpl, inspected the trailer for serviceability.

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and ensured that the container was square on the trolley before connecting the trolley to the Landrover. The driver, Jar Tech, drove the vehicle at what he considered to be a safe speed.

PARTICULARS AND DRIVER AUTHORIZATION

20. The Board finds that at the time of the incident, the Service Landrover (17 KA 47) was on a correctly authorised run on a correctly authorised route. The Board also finds that the driver Jar Tech was correctly authorised to drive Landrover vehicles and was qualified to tow SA Trolleys.

LOSS AND DAMAGE

21. The Board finds that:

a. There was no loss of equipment or injury resulting from the incident.

b. There was no significant damage caused to the Landrover (17 KA 17) or the Type SA Trolley (Local Serial No 245).

c. The incident occurred on Service property.

22. The Board finds that there was damage to both the container (GDF/CIR 124) and weapon, both of which were declared unserviceable. The extent of the damage and the cost will only be known after a detailed investigation has been made in the United Kingdom.

23. The Board finds that the damage arose out of and in the course of the official duties of the Service personnel involved in the fulfilment of a properly authorised task.

24. The Board finds that the damage to both the weapon and the container occurred because the containerised weapon was not secured to the Type SA Trolley as required by SD 314 (3rd Edition) Leaflet 71 para 16 and described in AP 1106-0605-5 Section 3 Chapter 5. The requirement to secure the container to the trolley was mandatory and was known to all those personnel in positions of responsibility within the SSA. The damage was, therefore, occasioned by a wrongful act and negligence on the part of those personnel who were responsible for ensuring the security of the container and for the standards of work within the SSA. The degree of culpability are assessed later in the Findings.
25. The Board finds that the damage occurred to the weapon and its container because they fell from the Type 34 Trolley. No other action occurred which caused any damage prior to the incident and the actual causes quoted in the findings at para 14 would have been totally negated if the mandatory regulations had been adhered to. Therefore, the non-compliance with the regulations was a wrongful act and was directly and wholly responsible for the damage to the container and weapon.

26. The Board finds that the damage to the weapon and its container could have been prevented by due care and attention to mandatory regulations by the following personnel:

Sqn Ldr
Flt Lt
WO
Ch Tech
Sgt
Cpl
Jnr Tech

27. After reviewing all the evidence, the Board finds that the following persons were involved in the causes of the incident on 2 May 84. The Board finds that all those mentioned below were negligent and that in some cases that negligence was culpable.
1. The Board observes that:

a. There is unsupported evidence indicating that a Landrover toved a SA Trolley with a container over rough land within the SSA. If this did occur it would be in direct contravention of SD 914 Leaflet P11 which states that, except in emergency, trolleys with nuclear weapons are only to be moved over good surface roads.

b. The Command Weapons Engineering Standards Advisory Team (WESAT) and MOD Weapon Standardisation Team (WST) make annual inspections of RAF Bruggen's SSA activities. The MOD WST are an independent body tasked to examine all the safety and security aspects of nuclear weapons on RAF stations. Their reports on the Bruggen SSA appear to have always been good except for a poor fire practice in 1982. However, there is evidence to show that unsecured containers have been moved around the SSA since Oct 81.

c. On the 2 May 84, the RAF Bruggen SSA had in their possession a total of 96 chains for use on restraint kits. There was some considerable difficulty in establishing exactly what comprised a serviceable restraint chain. AP 1108-0002-1 lists the constituent parts of a restraint kit but gives a different reference number for the chains to the number given in AP 1108-0505-5 the loading Schedule for the SA Trolley, which itself lists two separate reference numbers. In addition 64 chains have no unique identification number; without this a chain cannot be identified and serviced. It was accepted that there was a shortage of securing logos, which meant that even if all the chains had been usable, only 6 full kits would have been available.

d. The post of the P and A Clerk in the SSA at Bruggen was vacant for a period of approximately 7 months. While the post was left vacant the newly arrived Cpl Supplier was carrying out both his own duties and those of the P and A Clerk. The Board considers that the 7 month period was excessive and placed too high a burden upon the SSA staff to maintain the clerical and supply accounting standards required.

e. Ch Tech stated that the route taken by Jnr Tech when moving the container from Building 331 to Building 328 was against the one-way system. His evidence was refuted by Sgt. The Board finds that the route taken by Jnr Tech was in accordance with the one-way system in force at the time and that Ch Tech was confusing the present system with the system which had been in operation prior to Feb 84.
1. There was a conflict of evidence between Sgt and WO. Sgt claimed that he had expressed concern regarding the movement of unsecured containers to WO. However, WO denied that any member of the SSA staff had expressed concern at any time about the movement of unsecure containers. The Board was unable to resolve this conflict of evidence because there was no corroboration.

First and Sixteenth Witnesses
1. The Board recommends that disciplinary action should be considered against Sgt Ldr ..., Flt Lt ..., Sgt ... and Cpl ... Also that Jnr Tech ... should be formally interviewed and reminded of his responsibility to comply with mandatory regulations.

2. The Board further recommends the following:

   a. That all personnel associated in any way with nuclear weapons be reminded that all relevant regulations are to be complied with and there can be no deviation from recognised schedules.

   b. That the design of the container 750K/04 be reviewed to improve the protection that it affords the weapon.

   c. That the scope of the annual POD WST and Command (NDAF) inspections be reviewed to ensure that all activities associated with mandatory regulations and schedules are examined.

   d. That the RAAF Supply Squadron review their procedures for the issue of section 76 Ground Support Equipment. In particular, to ensure that the equipment is fully serviceable when issued to user units.

   e. That all RAAF Braggan Engineering Wing Orders and Instructions pertaining to the SSA should be examined for their relevance and correctness and that all SSA personnel should sign annually as having read these orders.

   f. That a thorough survey and assessment should be completed of the ground equipment and its supporting documentation held by the SSA at RAAF Braggan.

   g. That a review be carried out to ensure that all operating practices and procedures within the RAAF Braggan SSA comply with all mandatory requirements.

   h. That check lists and written briefs be produced for major activities within the SSA which include all mandatory safety precautions and references to relevant publications.

   i. That the specialist courses at RAAF SUPU be reviewed to ensure that sufficient emphasis is placed on the safety aspects of the handling of nuclear weapons.
BOARD FINDINGS

1. I agree with the Board that the major contributory factor in this incident was that the weapon transit container concerned was being towed on an SA trolley without proper restraint. I also agree that jar Tech, Cpl, Sgt, Sft Tech, WO, Flt Lt and Sqd Ldr were all negligent to some degree. However, in my view, the Board has not given due weight to the contributory effect which equipment shortages had on the evolution of malpractice which was at the root of this incident.

2. The 4 Restraint Kits (76 DR 109) held at RAF Bruggen were insufficient for the number of weapon transit containers which had to be handled on most Routine Logistic Flights (RLF), and as stated in evidence this was brought to the attention of higher authorities twice by Flt Lt HQ RAPG and MOD staffs supported the case for a total of 8 Restraint Kits to be held, but additional kits have still not been received. The shortage of Restraint Kits is most noticeable during RLF movements with short turn round times, and as an aside, I am disappointed that the Board has not highlighted the fact that this is often the case. As on 2 May, priority has always been given to using the few Restraint Kits available on the trolleys with gravity rollers which were used to transport containers between SSA and RLF aircraft. Then, especially when under pressure to meet deadlines, SSA staff have apparently succumbed to the temptation to speed up the whole transfer operation by simultaneously manhandling unrestrained containers within the SSA.

As the shortages of Restraint Kits continued to prevail over the years, so the step from manhandling unrestrained containers between adjacent buildings to towing them around the site became an inevitable though dangerous escalation of this malpractice. Although the movement of unrestrained containers by any means has always been inexcusable, I believe the shortages of Restraint Kits was a mitigating factor which eased SSA staffs towards this malpractice over the years. Having said that, I am disappointed that previous SSA staffs allowed this malpractice to become routine without informing higher authorities of their specific and continuing predicament.

3. On the night of 2 May 84 the SSA staff believed, rightly or wrongly, that only 3 of the 4 Restraint Kits were fully serviceable for use. A decision was made to split the third serviceable kit between the 2 gravity roller trolleys, purely to back up the 2 Restraint Kits already positioned and thus reduce the risk of containers becoming stranded between the RLF aircraft and the SSA site. This decision may have been questionable, but it was made for bona fide reasons nonetheless. However, since there was no pressure on the SSA staff to meet a turnround deadline on 2 May 84, there was no excuse whatsoever for moving any unrestrained containers on trolleys by any means. Action should therefore be taken against those who were found to be negligent in this incident.

4. Jar Tech. I agree with the Board that Jar Tech negligence was excusable and I recommend that I should formally interview him to remind him of his responsibility to comply with mandatory regulations.

5. Cpl. I do not agree with the Board's findings that Cpl negligence was culpable. Although, like Jar Tech, he was aware that containers were supposed to be restrained for any movement by trolley, he
was also aware that there was a shortage of Restraint Kits, and in complying
with the orders he was given by Sgt he was continuing a practice, however
wrong, which had become almost an SOP. I therefore consider that disciplinary
action against Cpl would be inappropriate. Instead, I recommend that
I should formally interview him along with Jr Tech.

6. Sgt. I agree with the Board that Sgts negligence was culpable.
He not only knew that the practice of moving unrestrained containers by trolley
was a violation of regulations, but also acknowledged that the practice of
towing unrestrained containers was dangerous. Even so, he permitted men under
his direct control and supervision to continue with this malpractice. I therefore
consider that disciplinary action should be taken against him.

7. Chf Tech. In addition to being the SSA controller, Chf Tech
was fulfilling the duties of WO IC SSA on 2 May 84. It was his responsibility
to ensure that all activities with the SSA were conducted in accordance with
mandatory regulations and approved schedules. Instead, although he was aware
that unrestrained containers were being towed around the SSA site, he took no
action to stop this malpractice. I therefore agree with the Board that Chf Tech
was culpably negligent, but I do not agree that the degree of culpability
was simple, to use the Board’s term. He failed in his duty most notably in the
joint supervisory capacity he held on 2 May 84. I therefore consider that
disciplinary action should be taken against him.

8. WO. I entirely agree with the Board’s findings that WO was
culpably negligent, and in view of the fact that he has condoned such flagrant
disregard of mandatory regulations over such an extended period, I recommend that
disciplinary action should be taken against him. In the meantime I have suspended
him from his duties because I have lost confidence in his ability to run my SSA,
and I recommend that he be posted under the terms of QR 584(2).

9. Flt Lt. I agree with the Board that Flt Lt was culpably negligent
for condoning, however tacitly, the malpractice of moving unrestrained containers
around the SSA site. However, in my view, the following points in mitigation
are relevant:

a. Unlike WO, Flt Lt is responsible for the RAF Bruggen
conventional Weapons Explosive Storage Area (ESA) as well as the SSA, and
as my Arm Eng Sqn has been understaffed by up to 20% over the past year so
his job as Flt Cdr has been made very demanding. As a result he has had less
time than he would have wished for direct supervision of both the SSA and the
ESA.

b. He did take action to highlight the shortfall in Restraint Kits to
der higher authorities, and although he could have taken more positive action
to pursue the delivery of more Restraining Kits, so that charge could also
be laid at the door of the higher authorities concerned. In Flt Lt’s
case, his lack of further action can be explained, and I believe excused to
some degree, by the increased workload he was subjected to because of the
undermanning on Arm Eng Sqn.
c. Although Flt Lt was aware that unrestrained containers were
being manhandled between buildings within the SSA, from the evidence
available he never knew that unrestrained containers were being towed
also. Thus, unlike WC, he never at anytime, condoned the gross
malpractice which resulted in the incident on 2 May.

10. Although Flt Lt action in condoning even the manhandling of unrestrained
containers on SA trolleys was inexcusable, he has been a most diligent and conscientious
Flt Cdr in all other respects. He has worked tirelessly and with dedication to
achieve the tasks set him, notwithstanding his shortfall of manpower and equipment,
and through his personal leadership and example his flight has completed its heavy
tasks with some distinction over the past year, often in difficult circumstances.
As far as this SSA malpractice is concerned, he has been badly let down by his
subordinates who sanctioned without his knowledge the escalation from low risk
manhandling of unrestrained containers over short distances, to the outrageously
high risk practice of towing the same. I consider that it would be inappropriate
to bring disciplinary action against Flt Lt for this incident, but because
he condoned even the principle of moving unrestrained containers on trolleys, he
is blameworthy to some degree, I recommend that he should be formally interviewed
by the Deputy Commander RAM. Thereafter, I recommend that his forthcoming
promotion to acting Squadron Leader and posting to RAF Bruggen as S Eng O
should stand. He is a hardworking and very loyal officer, and this one lapse in
supervision has been but one blemish on an otherwise excellent tour as Flt Cdr
at RAF Bruggen. It would be inappropriate and excessive in my view to cancel
a posting which he has well earned during a difficult tour at RAF Bruggen because
of this incident.

11. Sqn Ldr. I do not agree with the Board’s findings that Sqn Ldr
negligence was culpable. Although he was aware that some containers were being
manhandled unrestrained on trolleys for a short period of time last year, I am
satisfied that, having noted the MOD message which agreed the RAF Bruggen case
for more Restraining Kits, he believed the problem concerning the shortage of kits
had been solved. It could be argued that he should have taken more positive
action not only to confirm this, but also to ensure that the malpractice of
moving unrestrained containers had been stopped. However, as with Flt Lt
there are mitigating factors which I believe are relevant. Because his office is
on the other side of the airfield from the weapon storage area and for good
reasons, it is not easy for him to exercise frequent direct supervision of
either the SSA or ESA. This problem was exacerbated during the second half of
1983, after the original malpractice was brought to his attention, because he
was not only undermanned on his squadron by up to 20%, but also short of an officer
who was detached to the Falkland Islands and on courses from 11 Jul 83 to 9 Jan 84.
Some idea of the effect of Arm Eng Sqn undermanning can be gained from the Board’s
Observations para 1d. Whilst Sqn Ldr supervision of the SSA may well
have been less than ideal this was understandable in the circumstances, at least
to some degree. It was most uncharacteristic of not to follow up the
delivery of more Restraining Kits and tighten up practices in the SSA once the
shortages of kits had been brought to his attention, because he is a very highly
motivated officer who in all other respects has shown meticulous attention to
detail, especially with regard to armament regulations. Moreover, as he was not
in a position to directly supervise all day to day activities in the SSA, I
consider that it would be inappropriate to take disciplinary action against him
concerning this incident. Instead, I recommend that he be interviewed by his
AO Eng and reminded of his responsibilities.
D OBSERVATIONS

12. Para 1a. It is unfortunate that the Board could not positively determine whether there had been an instance of towing a full container over the grass in the SSA. However, all personnel have been reminded that this is expressly prohibited in SD 814 unless there is a genuine emergency.

13. Para 1b. The malpractice of moving unrestrained containers by trolley has been positively stopped at RAF Bruggen. All appropriate personnel have been briefed accordingly.

14. Para 1c. The anomaly between AP 11OH-0002-1 and AP 11OH-0605-5 quoting different reference numbers for the chains has been referred to MOD Wpn Eng for resolution.

15. Para 1d. The SSA P&A Clk was lost on repatriation to UK on 1 Oct 83 and was not replaced because the global manning level for that rank had fallen to 81%. Only one other Cpl at RAF Bruggen had the required security clearance for SSA duties, but he was employed on higher priority work. However, a subsequent reallocation of manpower has enabled the SSA P&A Clk post to be filled from 23 May 84.

16. Para 1e. I agree that Chf Tech was probably confused, but I do not believe the one way traffic system within SSA was relevant to the accident. Suffice to say Jnr Tech was driving within current requirements.

17. Para 1f. It is unfortunate that there is a conflict of evidence between 2 witnesses. However, if Sgt obtained no response from WO after expressing his concern, it was his duty to take this matter to higher authority. This he failed to do.

BOARD RECOMMENDATIONS

18. Para 2a. All personnel at RAF Bruggen employed in any aspect of nuclear weapon operations have been reminded that all relevant regulations are to be complied with and that there is to be no deviation whatsoever from recognised schedules without authorisation from the appropriate authority.

19. Para 2b. I am most surprised that such damage could have occurred to the weapon after what was a relatively short fall of the container from a slow moving trolley. I strongly endorse the Board's recommendations for a review of the design of the 76 UK/04 container.

20. Para 2c. The annual MOD WST inspection is a very thorough one, and before this incident I did not believe that there was any aspect of our nuclear operations that was not checked. The very satisfactory 1983 WST report gave me confidence on taking command of RAF Bruggen that all regulations were being meticulously followed, not only in the SSA, but in all areas associated with nuclear weapons. I agree with the Board that the WST and WESAT inspections should include all areas where mandatory regulations and schedules are in force.

21. Para 2d. I agree that RAFA SUPU Supply Squadron procedures for the issue of section 76 Ground Support Equipment should be reviewed. The confusion as to the quantity of serviceability state of our current holdings of

[Signature]

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Restraining Kits would not have arisen if fully serviceable equipment had been issued.

22. Para 2a to 2h. I have already conducted through a Board of Officers a thorough review of all activities associated with nuclear weapons at RAF Bruggen, and in short no further malpractices which might in anyway affect weapon safety were encountered. Instead my Board found that apart from the malpractice highlighted by the incident which led to this Board, all procedures and practices were sound and rigidly within laid down regulations. I have utmost confidence therefore that all activities concerned with nuclear weapons at RAF Bruggen are as safe as we can humanly make them. A full report has been submitted to HQ RAFO.

23. Para 2i. I agree that the specialist courses at RAFOPEU should be reviewed to ensure that emphasis is placed on safety aspects of the handling of nuclear weapons. Furthermore, I recommend that training on the type 76 DK/04 container and its tie down technique be included in RAFOPEU courses nos 3A, 9, 12AF and 16.

May 1984

Group Captain
Officer Commanding
Royal Air Force Bruggen
COMMENTS BY DEPUTY COMMANDER

1. This incident occurred because a safety regulation was not observed. There was no valid reason for its non-observation. The shortage of restraining kits is irrelevant as an excuse; indeed the failure to pursue the provision of the 4 extra kits requested raises the implication that not one of those directly involved at Bruggen was or had been very concerned about the breach of this particular regulation.

2. I have considered carefully whether any responsibility for this proven malpractice and apparently casual attitude of mind extends either to the Station Commander or to the Officer Commanding Engineering Wing. In the absence of any indication by the Officer Commanding Armament Squadron of difficulty in meeting the logistic re-supply tasks, and in view of the fact that the malpractice was not picked up either by the Ministry of Defence Weapons Standardisation Team (WST) or this Headquarters' Weapons Engineering Standards Advisory Team (WESAT), I believe that neither man could reasonably have been expected to have been aware either of the breach of regulations or of the attitude of mind which seems to have been associated with it. That said, I do not believe that it is in any way a counsel of perfection to insist that those who manage Stations with special weapons be actively alive to the need to ensure that all regulations are obeyed; I will make this point within this Command.

3. I accept that the seven men directly involved, that is Squadron Leader , Flight Lieutenant , Warrant Officer , Chief Technician , Sergeant , Corporal and Junior Technician , were all negligent. The negligence of Corporal and Junior Technician is to some extent excused by the knowledge of the breach and its acceptance by their superiors. Although this may reduce their blameworthiness, they nevertheless were aware that they were failing to observe regulations which were part of the stringent rules governing the handling of special weapons. The remaining five I judge to be negligent to a higher degree: Sergeant for allowing the towing of unrestrained loads to relieve the congestion outside Building 331; Chief Technician for failing to impose the regulations relating to securing containers on trolleys, and for failing to lay down and brief a plan for in-SSA work in connection with the Routine Logistics Flights; Warrant Officer for failing to eliminate the established malpractices of towing unsecured loads, and for failing either to resolve or bring to the notice of his Flight Commander the unsatisfactory situation regarding restraining kits; Flight Lieutenant for failing to enforce regulations he knew were being broken, for failing to follow up the introduction of the additional kits he requested, and for failing to report the effects that lack of manpower was having on his ability to adhere to special weapon handling safety procedures; Squadron Leader for failing to enforce regulations he knew were being broken, for failing to supervise Flight Lieutenant adequately, and for failing to inform his Officer Commanding Engineering Wing of the problems manpower difficulties were causing in the SSA. Squadron Leader , in addition, attracts reprobation for showing lack of judgement in absenting himself from RAF Bruggen on the day of the RLF knowing that Warrant Officer was on leave.

OBSERVATIONS

4. I accept the observations of the Board in general but would add the comment that the problem of undermanning in clerical support trades is a common one; in this case had the Station considered the difficulty sufficiently pressing, the resources were available to it to switch a suitably qualified clerk into the vacant post.
RECOMMENDATIONS

5. I differ slightly from the Board in my view of the actions which should be taken against the seven named individuals. My own recommendation is that disciplinary action should be taken by the Station Commander against Junior Technician, Corporal, Sergeant and Chief Technician, and by myself as the Appropriate Superior Authority against Warrant Officer, Flight Lieutenant and Squadron Leader. These three have forfeited the trust that must be placed in men with direct responsibility for the handling of special weapons and I consider therefore that they should also be removed from their posts; has already been replaced by normal posting action; administrative action has been initiated to remove the other two.

6. I accept the remainder of the Board's recommendations but would make the point that I believe that RAPASUPU courses already adequately cover the safety aspects of handling special weapons.

ACTIONS

7. As a result of the staffing of this Board's proceedings, the following actions have already been taken in addition to those indicated at para 5 above:

a. All personnel in the Command in any way associated with special weapons have been reminded that all relevant regulations are to be complied with and that there is to be no deviation from recognised schedules. They have also been reminded of all the regulations regarding the movement of special weapons.

b. The anomaly of chain referencing has been brought to the attention of MOD Wpn Eng 3(RAF).

c. MOD Wpn Eng 3(RAF) has tasked the design authority with a critical examination of the container and restraint system.

d. MOD Wpn Eng 3(RAF) has been invited to review the scope of WST examinations and asked to expand it to include study of the equipment and procedures associated with the movement of weapons in SSAs. The engineering check list is also to be enhanced.

e. MOD Wpn Eng 3(RAF) has been requested to instruct RAPASUPU to review their procedures for the issue of Section 76 Ground Support Equipment and to ensure that equipment is fully serviceable when issued to user units.

f. All orders, equipment and activities associated with special weapons within the Command have been examined following this incident. They were found to meet the mandatory requirements. In addition RAF Bruggen and Lahrbruch have been directed to produce concise instructions detailing the SSA activities and responsibilities associated with the support of Routine Logistic Flights.

Air Commodore
Deputy Commander
Royal Air Force Germany

July 1984