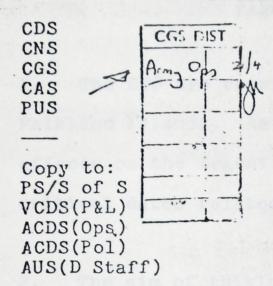
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DCDS(I) 26



SECRET

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THE SIEGE OF THE FALKLAND ISLANDS

1. Attached is my paper assessing the capability of the Argentine to withstand a blockade of the Falkland Islands. The detailed work supporting the paper will be circulated separately to your staffs.

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2. I suggest that this paper should form the basis of the intelligence contribution to the presentation to OD(SA) on Friday 23 April.

21 April 1982

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THE ARGENTINE CAPABILITY TO WITHSTAND A

SIEGE OF THE FALKLAND ISLANDS

INTRODUCTION

1. The COS are considering an air and sea blockade of the Falkland Islands. An assessment is therefore needed of the effects on the Argentine Garrison of the blockade, at various critical dates related to the arrival of the Task Force.

MIA

2. The aim of this paper is to determine the capability of the Argentine Garrison on the Falkland Islands to withstand a siege.

ASSUMPTION

3. We assume that the United Kingdom will impose a sea and air blockade of the Falkland Islands by 1 May 1982.

THE LOGISTIC PROBLEM

The Requirement

4. We are not privy to Argentine plans for the Falkland Islands. But we believe they will be attempting to build up the materiel the Garrison will need to withstand a seige of at least 60 days during which they may have to fight (at limited war rates) for up to 30 days. We have calculated the Argentines' logistic needs on the basis of the requirement of a UK force in similar circumstances. But the Argentines may see matters differently. We could, for instance, have over-insured on engineer stores, ammunition and even food. Our detailed working reveals a requirement of 3,000 and 4,000 tons for 7,000 and 10,000 troops respectively.

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SECRET UK EYES B

- our estimate excludes aviation fuel. The amount required is wholly dependent on the number and type of aircraft based at Stanley. Transport aircraft always carry sufficient fuel for the return journey. We know the Argentines have stock piled some aviation fuel but we do not know the quantities. Intensive flying operations from Port Stanley would certainly stretch the Argentine logistic system. In particular, the large fuel requirements of tactical fighters could well preclude their use. Movement Capability
- 6. Air. The Argentines have used the C130, the F27, the F28 and Boeing 737 to move men and materials to Port Stanley. We have calculated the total lift of these aircraft making an allowance for bad weather, and other considerations which reduce the payload actually carried. However, we lack convincing evidence of the total sortie rate and our estimates could be badly out. The principal result compared with our estimated requirement (for 60 days) is given below:

		Materiel		
Date	Men	Delivered	Required	
1 May	7,000	2,900 tons .	3,000 tons	
	10,000	2,400 tons .	4,000 tons	
7 May	7,000	3,700 tons	3,000 tons	
	10,000	3,200 tons	4,000 tons	
15 May	7,000	4,500 tons	3,000 tons	
	10,000	4,000 tons	4,000 tons	

7. Sea. Two tankers and 3 transport ships have visited Stanley between the invasion and 9 April. We believe that the former were used to top up the existing two x 4,000 ton diesel fuel

delivered. The tankers and the other transports probably offloaded a large number of 45 gallon drums of aviation fuel.

In addition we believe some 400 tons of stores was brought in
on the transports. We also assume that the LST and amphibious
assault vessels discharged the heavy equipment and vehicles of
the initial invasion and follow-up force, equivalent to a strong
brigade of four battalions.

8. Accumulated Stores/Men. We therefore assess that by 18 April the Argentines could have moved at least 6,000 men and 2,000 tons of equipment and supplies by air and sea. This would be in addition to that delivered by the invasion force.

SIZE OF THE GARRISON

- 9. As I have previously reported (1), the Argentines are likely to hold the Falkland Islands with a reinforced brigade group concentrated at four main locations. The major portion of the force, consisting of up to four battalions probably holds Fort Stanley and the airfield, a further battalion is at Darwin and another possibly divided between Fox Bay and Port Howard on the West Island. This order of battle, supported by some armoured vehicles, artillery and engineers, produces a force level of at least 6,000 troops.
- 10. But the Argentines may be worried that either their reserve is too weak or that the battalion on West Island is too stretched. In which case they may decide to reinforce further by an additional battalion. This would raise the force level to about 7,000.

Note:

1. DCDS(I) 26 dated 14 April 1982

Alternatively the Argentines may attempt to deny us a foothold on the Islands by occupying and holding the larger settlements and by dominating the likely landing beaches. At least 3 additional infantry battalions are needed for this option, raising the strength to about 10,000 troops and even at this level the defence is unlikely to be wholely effective. 12. The Argentines will have to balance strengths against logistics. We assess that by mid April they had at least 6.000 men together with most of the major equipments. At this stage they probably had 2-3 weeks of combat supplies. It would take them until 15 May to build the force up to 10,000 men with the appropriate logistic backing. The Argentines could build-up their manpower at the expense of logistic support. For example, reducing the ammunition requirement to 15 days combat would enable sufficient supplies to be in place by 7 May. Whatever the precise arrangements the Argentines could probably have a force of 7,000, with adequate supplies in place by 1 May 1982, to endure a blockade for two months and possibly longer.

ARGENTINE COUNTERS TO A BLOCKADE

Interdiction of the Task Force

13. Argentine Navy. The Argentine Navy could attempt to break the blockade by attacking the UK naval force. We believe the Argentines would be most unlikely to risk their surface fleet. But they would probably deploy their submarines, especially the two Type 209s. These are quiet running diesel driven boats which would pose a threat to the blockading force.

The Argentines could launch air Argentine Air Power. 14. attacks against the UK naval force with their carrier-borne However, they would be unlikely to raise more than about 7 aircraft for this task. In addition there are over 100 Argentine Air Force aircraft with radius of action to attack the Task Force out to about 550 nm. But these are essentially limited to visual conditions and their effectiveness is low. Nevertheless, we must assume they would try. The most significant threat is posed by the 5 Super Etendards with their EXOCET missiles. Although these aircraft have a modern weapons system they could still have difficulty in locating the Task Force and particularly in identifying the high value units. Moreover, their radius of action without inflight refuelling is limited to 350 nm. The Argentines' capabilities are covered in detail in our earlier assessments (1) (2).

Breaking the Blockade

of convenience) or civil aircraft in an attempt to beat the blockade. While merchant ships could be intercepted by the Task Force it would be impossible to stop a determined ship's captain without authority as a last resort to open fire. The Task Force could also have difficulty in stopping fast patrol craft - but these are unlikely to risk the open sea crossing in foul weather and carry little. But some helicopters could be used to ferry in

Notes:

- 1. DCDS(I) 26 dated 14. April 1982.
- 2. DCDS(I) 26 dated 16 April 1982.

small stores at the price of refuelling at Stanley. Light aircraft could possibly make use of the few airstrips usable in winter. and the Argentines could resort to air dropping from C130s.

Exploit Civilians

- 16. We have already argued (3) that the Argentines may interweave their defences with the civilian population to inhibit any UK attack. Indeed one of the problems facing the UK is the requirement to avoid harming the civilian population largely centred on Port Stanley. But there is now growing evidence that most of the civilians have moved out of Port Stanley to the settlements. Reports indicate that the population may have fallen to as little as 150. Should this be true it reduces one of the most severe constraints on the Task Force.
- The Argentines could also exploit on humanitarian grounds, the hardships imposed on the civil population. Although imported food stuffs for the civilians will probably run out in 1-2 months there are virtually unlimited supplies of local produce which would provide an adequate, through restricted diet. There is a small hospital in Port Stanley but it cannot deal with serious cases which must be transferred to Buenos Aires. This might give the Argentines some useful opportunities for anti-British propaganda.
- 18. The residents would also be affected by fuel shortages. They depend on diesel oil to generate electricity and to drive their landrovers. However the main fuel used for cooking and Note:
- 3. DS(Int)5/2/15 dated 14 April 1982.

heating is peat which is redily available. Thus a lack of fuel oils would cause inconvenience rather than serious hardship.

ARGENTINE VULNERABILITIES

The Port Stanley Airfield .

is the garrison's jugular vein. Its neutralisation would not only cut the prime remaining link with the mainland but would also preclude the effective use of fighter aircraft for air defence. It is vulnerable to attack from the air, its installations are susceptible to special forces operations and its land link with the town could be severed. Its loss would also be a major psychological blow.

Deployment

- 20. The operational effectiveness of the Garrison will, of course, be governed by their deployment. At Stanley the bulk of the Garrison will be drawn into the built-up areas by the harsh weather. At night outposts will be hard pressed to stay alert. Their defensive positions, given the lack of experience of most of their troops, are probably especially vulnerable to special forces.
- 21. Outside Stanley, movement to the deployed battalions will be almost entirely by helicopter. If the latter can be destroyed on the airfield, the Argentines' would forfeit operational flexibility. Reserves could not be moved nor casualties evacuated and re-supply would become tenuous. The forward positions would be marooned and insecure. Morale would undoubtedly suffer.

Logistics

- 22. The Argentine Garrison with its L of C severed would have to fall back on its stocks. Food could be supplemented from the sheep, and fuel by the Islands' peat. We suspect there is a substantial stock-pile of supplies at Moody Camp and at the airfield. There are probably others. But the pattern does not bear the hallmark of a carefully prepared logistic plan.

 Therefore, when identified, stocks may prove comparatively easy to destroy from the air or from the ground.
- 23. Another weak link is the fresh water supply. Port Stanley relies on a single pump house and filtration plant which is barely adequate for the normal population of 1,000. Its loss would have the most serious consequences for the Garrison and for the remaining civilians.

Command and Control

24. The whole cohesion of the Garrison's defence depends, of course, on effective command and control. The Joint Force Headquarters, probably located in the Governor's House, is the key. It is therefore a critical target.

Morale

25. The Garrison faces an obvious morale problem. Most will have been on the Islands for approaching a month by the start of the blockade. The environment is inhospitable, the weather harsh, the atmosphere unfriendly, living conditions primitive and food barely adequate. Some 80 per cent are young conscripts with a few months service, ill-prepared and unaccustomed to the rigorous life now imposed upon them. There can be few enjoyable distractions.

Above all the ordinary soldier will feel increasingly isolated, and perhaps abandoned, once the air L of C is cut. His motivation will be difficult to sustain.

26. Any reverses the Argentines suffer, such as the loss of South Georgia or ships sunk, must be forcibly and graphically rammed home. If they are accompanied by a vigorous campaign of harrassment, from the air and on the ground, the Garrison's will to fight will be further sapped. In sum, Argentine morale is vulnerable to a carefully orchestrated attack, embracing all methods both psychological and physical.

CONCLUSIONS

- 28. We conclude that by 1 May a Garrison of 7,000, and in the extreme case up to 10,000, could be in place with sufficient supplies to endure a siege of up to two months and possibly longer.
- 29. We also conclude that the effects of the blockade will only bite deep if they are accompanied by an aggressive campaign of attrition by attack from the air and by special forces operations on the ground directed at the Garrison itself, its command links, its critical stocks and above all the airfield.
- 30. Finally we conclude that the Garrison's morale is the crucial, and most vulnerable, element in the Argentine defence. A carefully orchestrated attack upon it has promise of success. From mid-May and onwards the Garrison's will to resist may start to crumble. Thereafter morale will continue increasingly to deteriorate to the point when, in about late July, the Garrison might not offer effective resistance to direct assault.

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SIEGE OF THE FALKLAND ISLANDS

Reference:

AUS(D Staff)

A. DCDS(I) 26 dated 21 April 1982.

Further to DCDS(I)'s Loose Minute at Reference A on the above subject, I now attach the working notes supporting DCDS(I)'s paper.

21 April 1982

R G Ashford
Air Commodore (Intelligence)

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AIRCRAFT FUEL REQUIREMENTS

1. We list below aircraft which have used Port Stanley airfield together with the amount of fuel they would use on a single sortie. We have assumed that each sortie would consume 80 per cent of its total internal tank capacity.

Aircraft	Fuel Consumed per Sortie (in litres)	Type of Fuel
Pucara	1260	Avtur
Tracker	1375	II.
Chinook	1930	"
Puma	750	"
Bell 205	450	n
Augusta 109	150	11

2. If the runway were extended it is possible that the Mirage III could be based at Port Stanley. It would use 1400 litres under the conditions we postulate.

THE REQUIREMENT FOR AMMUNITION, COMBAT SUPPLIES AND ENGINEER STORES

3. <u>Unit Daily Requirement</u>. The following figures are based on the requirements of a British air-portable force on light scales for a limited war situation. They have been modified to take account of the different size of the various types of unit:

Unit Type	Ammunition	Combat Supplies
Infantry Battalion	6 tons	1 ton
Arty 105mm Regt	12 tons	.5 tons
Armed Recce Coy	2 tons	·3 tons
Arty AA Coy	2 tons	.2 tons
Engr Coy	urire the First	.2 tons
HQ, Sigs & Sp etc	3 tons	2.8 tons

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COS S25(2)

SECRET UK EYES B

- Engineer Stores. The total stores required for an air portable brigade of three battalions operating in a limited war situation on the Falkland Islands is estimated at 500 tons, including about 100 tons of mines. Thr remaining 400 tons includes defence stores, trackway, generators, plant, bridging material, prefabricated barracks for 200 men and spaces. Each aditional battalion is estimated as requiring 50 tons.
- 5. Force Daily Requirement. The total daily requirement for the different ground force levels (plus the total engineer stores requirement) is:

Force Level	Ammunition	Combat Supplies	Total Daily	Engineer Stores
6,000 troops (6 x Bns)	55 tons	10 tons	65 tons	650 tons
7,000 troops (7 x Bns)	61 tons	11 tons	67 tons	700 tons
10,000 troops (10 x Bns)	76 tons	14 tons	90 tons	850 tons

THE AIR MOVEMENT CAPABILITY

Sorties Available

- 6. British personnel evacuated from the Falkland Islands on 15 April have reported that the following aircraft movements have taken place on a daily basis:
 - 12 x C-130 sorties per day
 - $4 \times F27/F28$ sorties per day
 - 1 x Boeing 737 sorties per day (120 pax)
- 7. It is unlikely that this level of activity could have been achieved from the date of the invasion and earlier reports indicated that during the first week (3-10 April) the number of sorties flown were unlikely to be greater than:

9 x C-130 sorties per day

3 x F27/28 sorties per day

Payloads

8. The estimated payload of the C-130 operating into Stanley is 92 troops or 20 tons. As the airlift is likely to have been planned and executed in a haphazard way these payloads may not have been achieved and it is assessed that 15 tons is a more realistic figure. The F27/28 should be able to carry an average of 8 tons under the same conditions.

Men and Material moved by Air

yehicles and the majority of the heavy equipment will have been moved to the Islands by the assault sea lift or in the 7 follow up transports that docked at Stanley between 4 and 9 April. It is assessed that up to two battalions plus their vehicles and support weapons will have been airlifted to the Islands to achieve the 6,000 troop force level with one or three extra battalions needed for the 7,000 and 10,000 levels respectively. It is estimated that 15 x C-130, 4 x F27/28 and 1 x 737 sorties are needed to move each battalion.

10. It is likely that some other additional guns and equipment will have been airlifted to Stanley and 15 x C-130 sorties have been allowed for this task. About 1,000 HQ and support staff will also be moved by air to complete the garrison and 7 x F27/28 and 4 x 737 sorties are needed for this task.

Wother

11. It has been reported that during the first half of April flying was not possible on two days because of bad weather.

The weather is likely to deteriorate as winter approaches and it is assessed that up to 3 days will be lost between the middle of April and 1 May. This rate of lost flying is likely to continue throughout May.

Summary of Air Capability

Aircraft Sorties	(6 days flying)	(6 days flying)	19 April-1 May (10 days flying)
C-130	36	72	90
F27/28	24	24	30
Boeing 737	-	6	_
Total Daily Payload	120 tons	210 tons	120 tons

FALKLAND ISLANDS: FUEL AND POWER

Peat

12. The only fuel produced locally is peat and this is the main source of heating on all the farms and in most of the buildings in Port Stanley. Peat stocks are unlimited; the peat cutting season is from October - December; it is left to dry for a few weeks and is then ready for use. Thus at the present time (April) stocks of dried peat are considerable. Peat is also generally used for cooking and water-heating. Out of 380 residential buildings in Port Stanley 249 use peat as cooking fuel, in "The Camp" 198 out of 260.

Firewood

13. Practically non-existent.

tricity

14. The existing electric power generation and distribution system is confined to Port Stanley; in "The Camp" supplies are met by small independent diesel generators. The Port Stanley system comprised 3 diesel generator sets rated at a total of 1296 kw. Local demand is on average 314 kw throughout the year, with a high in August of 750 kw and a low in February of 120 kw. The government-owned and operated diesel power station on the southern shore, west of Port Stanley, has two 1,500 ton tanks of diesel oil (which fuel the power station) and these tanks are usually maintained above about 70% capacity. Some farms have electric power fed by 12-volt batteries charged by wind generators.

Diesel Oil

- 15. It is evident that diesel fuel is the commodity which is most important; on "The Camp" without diesel fuel the vast majority of farms' generators cannot operate, and without generators there is no electricity. In Port Stanely much more use is made of diesel oil for both cooking and heating water; some houses have diesel oil central heating. A few use electricity for cooking.
- 16. All diesel fuel is supplied by the Argentines. There are two 4,000 ton tanks on the north shore of Port Stanley and information from recent arrivals indicates that these tanks were topped up about 6 weeks ago. These tanks supply not only the power station's needs but also (via Falkland Island Company's two 50 ton tanks at East Jetty) local needs in Port Stanley and "The Camp". Diesel fuel is taken to the

- "Monsunen", which calls in every 6-8 weeks at the farms.

 (Recent information tells us that the "Monsunen" was

 "commandeered" by the Argentinians on 16 April for 5 days,
 but that the Argentines had promised to take diesel fuel in
 her to Port Darwin). A large farm (eg Port Howard) has its
 own storage tank of about 3,000 gallons, plus some 200
 gallons in reserve in drums, and under normal circumstances
 the stock does not drop below 800-1,000 gallons.
- 17. The exodus of inhabitants from Port Stanley will ease the demand for diesel oil in the town, but their arrival in "The Camp" places an extra strain on the farms" facilities. However, it is expected that rationing of diesel oil will have taken place, and we have no evidence to suggest that the Argentines will prevent the delivery of fuel oil once the Monsunen is handed back.
- 18. It is also apparent that those on "The Camp" can live without electricity without undue hardship; it would, of course, mean that their freezers would not operate but they are normally full of meat, and there is plenty of freh meat to replace any that is wasted.
- 19. The main means of transport, the Land Rover, is 75% diesel driven, and most of the tractors are also powered by diesel.

 Other Fuels
- 20. The Argentine-owned fuel depot situated on the eastern outskirts of Port Stanley has 23 small horizontal tanks which contain petrol and paraffin for domestic use, eg motor cars.

- he thought the contents of the tanks "were altered by the Argentines prior to the invasion".
- 21. Calor gas is imported from Argentina for domestic use 18 households in Port Stanley use it for cooking purposes.