The Basic Source Book er et pionerarbejde indenfor management, og det man på engelsk kalder 'vocational training'. Det blev i 1978 igangsat af SAS catering, som entrerede med medieforlaget AV-Media A/S, der var ejet af de 4 gamle skolebogsforlag G.E.C. Gad, Jul. Gjellerup, Munksgaard og P. Haase & Søn.

Medieforlaget, hvor jeg arbejdede som forlagsredaktør, skulle forestå undervisningsteknologens ansvarsområde i forbindelse med SAS's kontrakt med SAUDIA om uddannelse af ledere af et saudi-arabisk flykøkken. Og hvilket ansvar har så en undervisningsteknolog? Ordet blev forlagets varemærke for det at påtage sig medvirken ved produktion og tilrettelæggelse af undervisningsforløb til erhvervsuddannelser med industrien som undervisningsinstitutioner. Hvordan nu det? Jo, det drejede sig om med erhvervslivets aktører som base, at skabe rammer for undervisning efter princippet om 'learning by doing' i andre sammenhænge benævnt 'on the job training'. Pilotprojektet skulle skabe et bæredygtigt eksempel på, at industrier med et behov for at eksportere viden og kunnen, der ikke findes som etablerede uddannelser, alligevel kan være med. Med undervisningsteknologens medvirken kan virksomhedernes faglige ekspertise, der udgøres af virksomhedens design og dens medarbejdere, tilrettelægge, udforme og producere skræddersyede uddannelsesforløb, som træner ny arbejdskraft til at udfylde de arbejds- og ansvarsfunktioner, som en given industri forudsætter.

Mit arbejde i sammenhængen i 1978 var redaktionel og produktionsmæssig tilrettelæggelse. Og i samarbejde med SAS Caterings medarbejdere udarbejdede jeg som udgangspunkt for tilblivelsesprocessen det kapitel i **The Basic Source Book,** der introducerer **det faglige problem**, som 'in-flight food service operation' drejer sig om.

Træningsmaterialet til støtte og styring af den daglige jobtræning blev produceret med tidens teknik som håndlavede eksemplarer til hver af en håndfuld særligt udvalgte kandidater.

isc, 2014

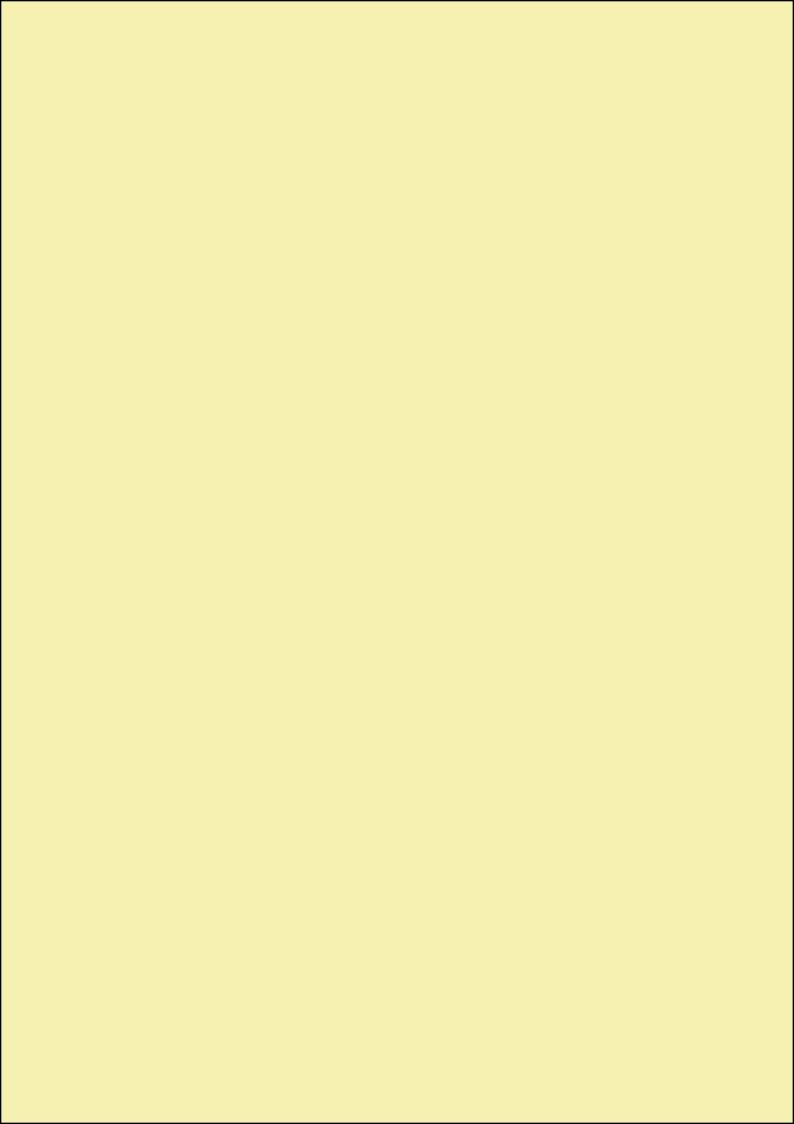


Basic Source Book



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CATERING DIVISION



Basic Source Book

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Catering Division



BASIC SOURCE BOOK

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This book is part of "Management Development Program" - inflight food service operational training.

The project is designed by SAS Catering, Copenhagen.

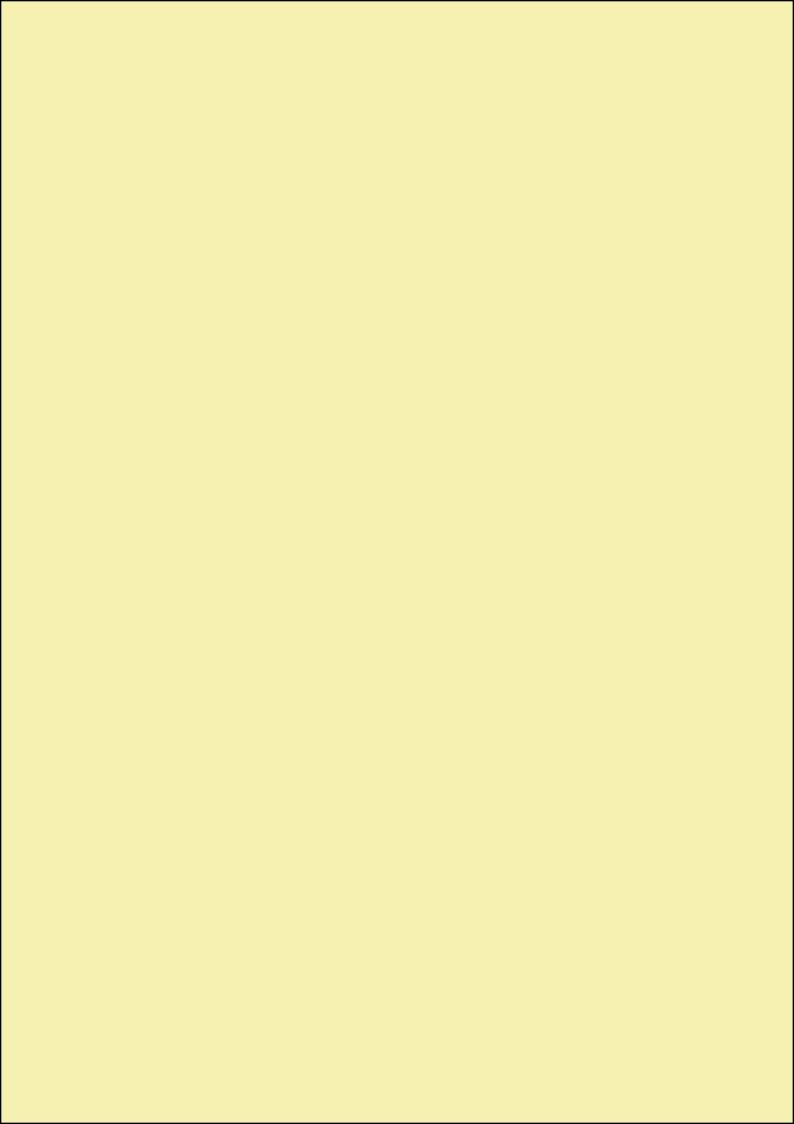
Project manager: Tom Hertel

Pedagogical and editorial preparation: AV-Media A/S, Copenhagen

Layout and diagrams: Martin Bassett

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Preface

His Excellency, Director-General Kamil Sindi and Vice-President, Marketing, Mohammad Al-Hassoun of SAUDIA, the national airline of the Kingdom of Saudi Arabia, have decided to form a catering organization with the objective of providing their passengers flying out of the Kingdom with the best possible in-flight food service.

SAS CATERING has agreed and is pleased to assist SAUDIA in building up the organization and training Saudi nationals to take over key managerial positions and run the organization themselves.

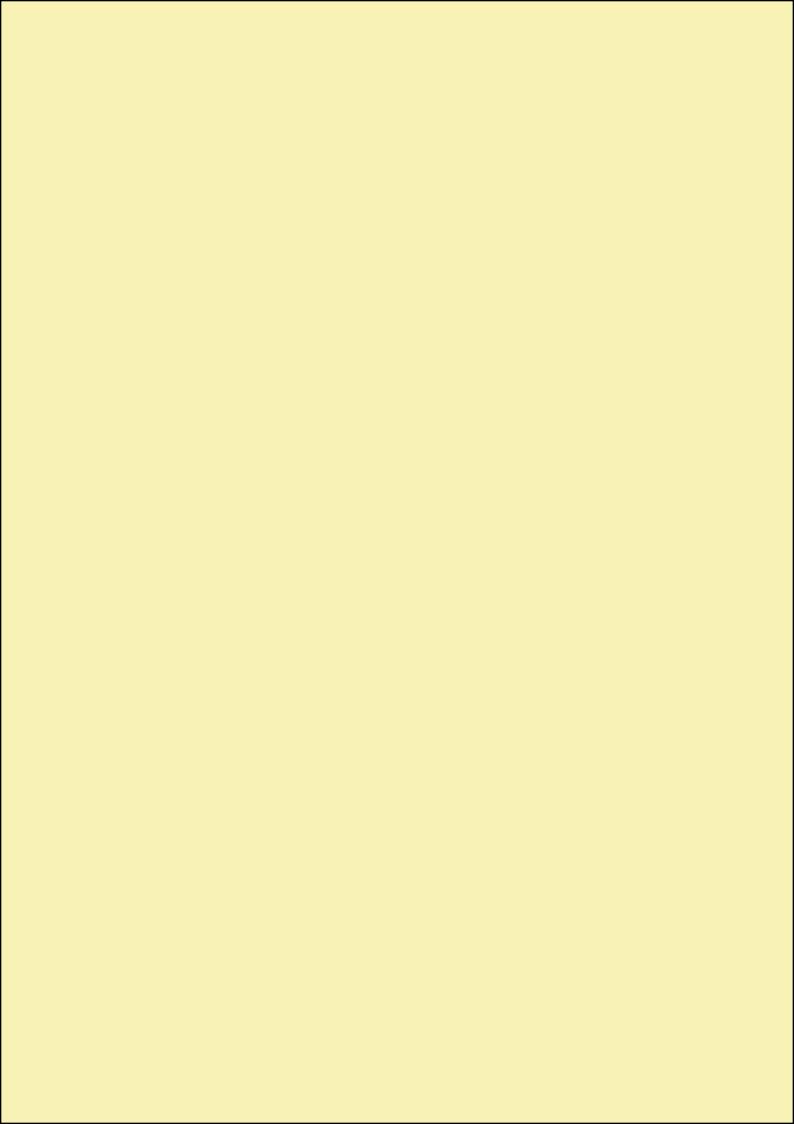
The aim of this Basic Source Book is to give the first candidates going through the training program the general background knowledge

and an understanding of how an in-flight food service operation works. Its basic guidelines should be used together with the Operational Training Manual during the solving of the tasks in the training contracts in the Learner Controlled Instruction in on-the-job training.

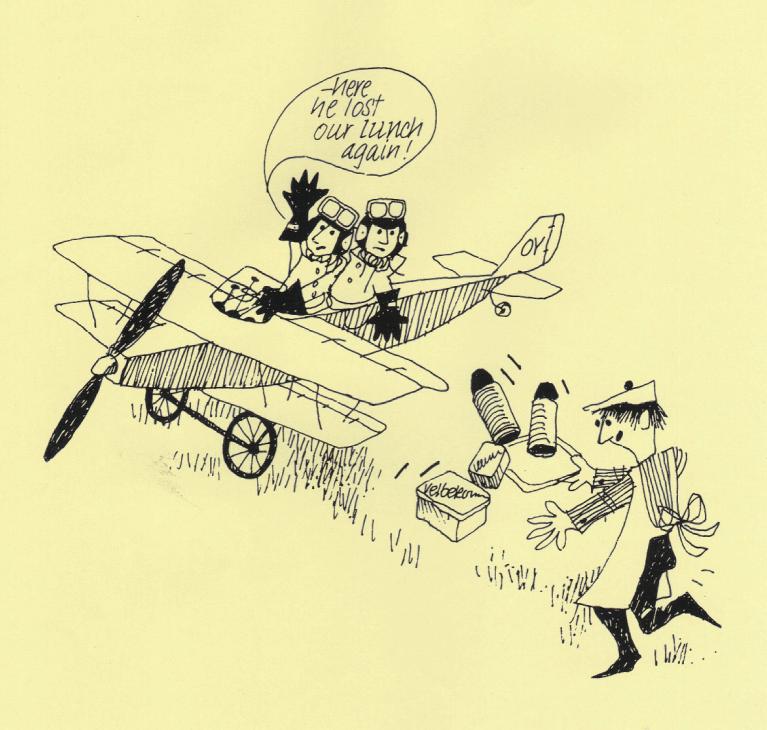
The book and the manual are working tools; they are not static but should be continually updated as appropriate to keep pace with development and progress in the food service industry and air transport.

SAS CATERING

Management Development



I Airline Catering



As more and more airlines fly the same types of aircraft on the same routes and with the same fares, in-flight service has become a crucial factor in attracting passengers.

But how did it all start?

Air transport is still relatively new and has developed rapidly.

In the very beginning - in the "old days", air transport meant slow, propeller-driven aircraft with unpressurized cabins. The food service at that time consisted more or less of coffee and cakes, etc., bought at the nearest patisserie.

Food was wrapped rather like a school lunchpack. Later, the local restaurant provided the food.

The continued development of air transport with pressurized cabins, longer legs between touchdowns, etc., demanded a development in the inflight food service. Cabin crew and appetizing food was to attract people away from other means of transport to the safer and faster air-transportation.

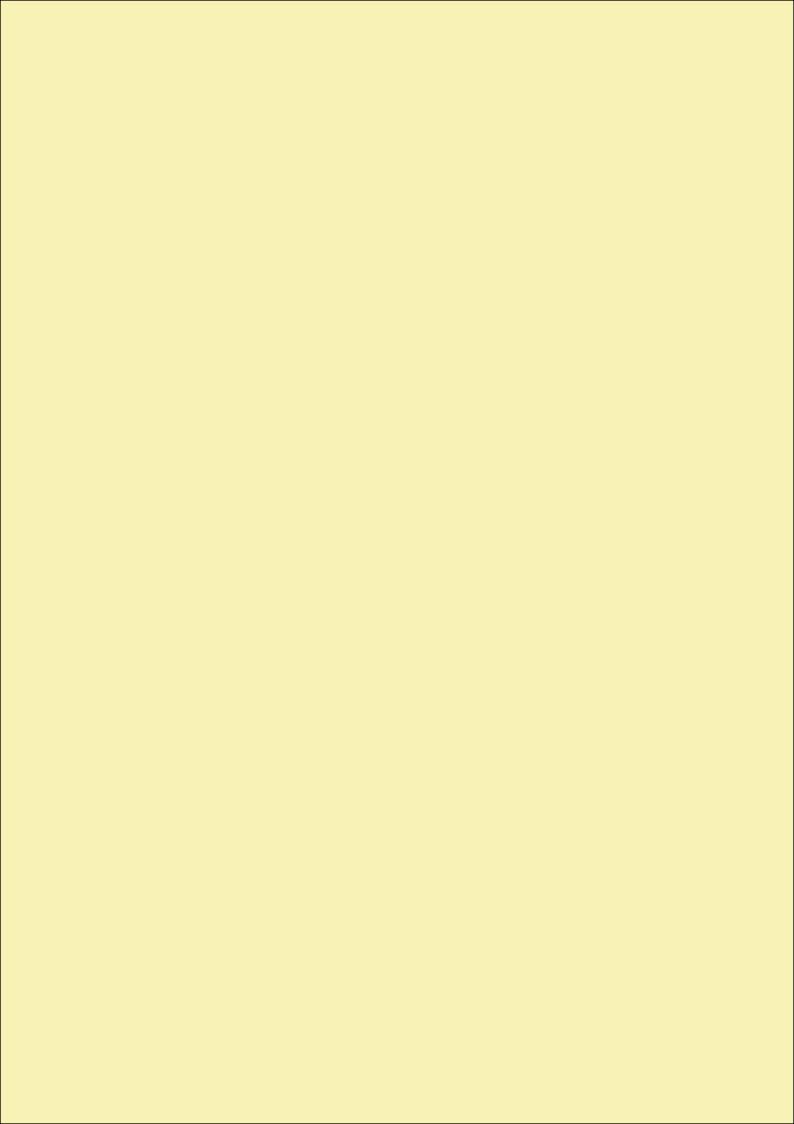
A combination of giving the passengers something to do during the flight and the physical need

for food dictated a more highly-developed concept of catering for in-flight service.

Since the start of the jet age in the early 1960's further developments have taken place in the handling and servicing of the flying passengers of today.

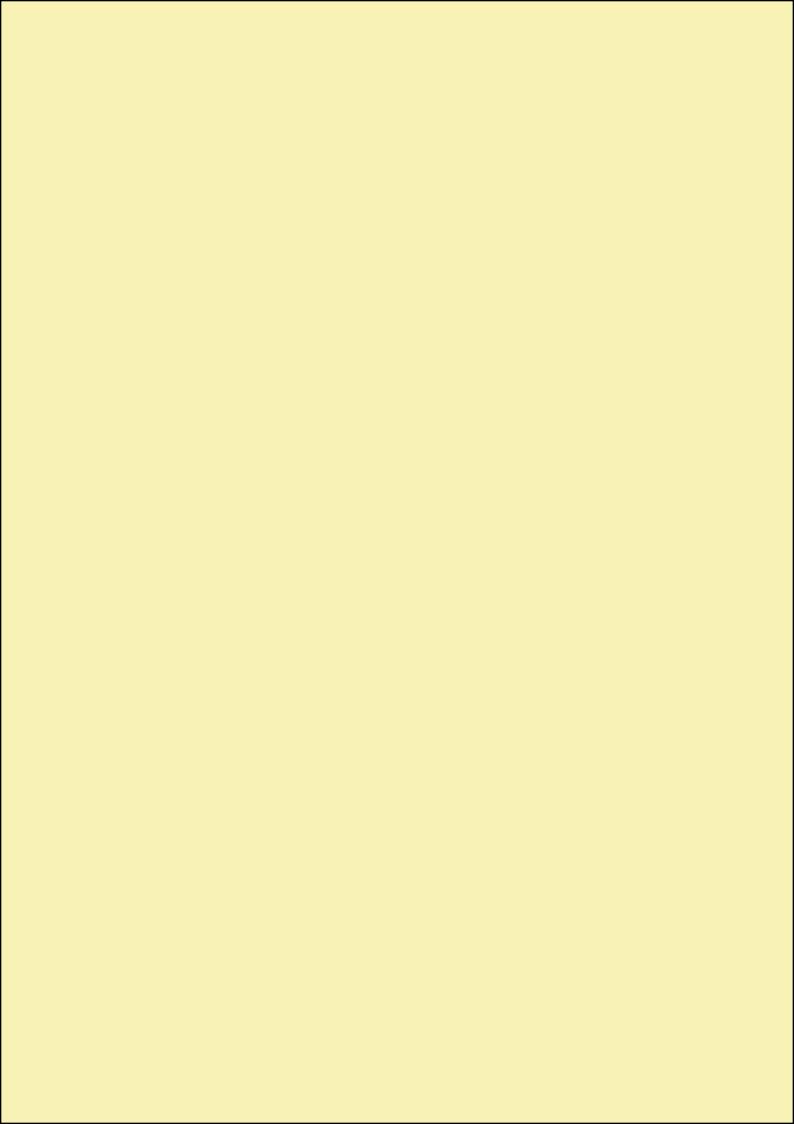
Procedures to keep the food fresh for longer periods and various heating methods on board the aircraft have been developed - food service units at destinations have been reduced as the distances planes can fly without intermediate stops have become greater. This has made it more complicated to run the food service catering system on the lines of a traditional restaurant.

Today it is an industry on the ground but still with the same task - to serve the passengers in the air - ready-made breakfasts, lunches, dinners and snacks prepared for serving thousands of feet up in the air, but still with the same objective - to please and tempt the passenger so that he forgets the travelling. Still the old restaurant philosophy but in a new and more efficient context - provide the airline's passengers with the best possible meals within a specific quality and quantity bracket as discussed and agreed upon between the airline's marketing people and the caterer.



\prod

The Food-service Unitits Organisation and Functions



If a flight kitchen is to carry out its allotted tasks successfully, a number of basic resources must be present. Just as it is important to ensure the presence of these resources, it is also, of course, extremely important to manage these resources correctly.



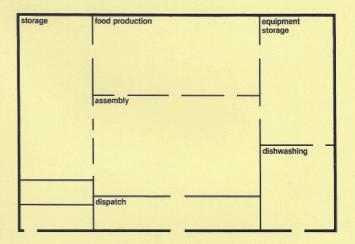
In this chapter we will take a closer look at the following points:

- 1. An ideal lay-out for a flight kitchn
- 2. The nature of the work tasks involved
- 3. Co-ordination of the work tasks

Facilities

A flight kitchen can be divided up into a number of more or less independent units. Each of these units will naturally have the equipment necessary for the unit to be able to carry

out its mission. Together the units comprise the basic facilities which are the prerequisite for overall production to be able to take place in the flight kitchen.



In the diagram we can see an ideal lay-out for a flight kitchen. The positioning of the respective departments in relation to one another is closely connected with the work tasks to be performed within the individual unit - and, most important: the stage they represent in the course of overall production!

The "outer" facilities, however, are not sufficient in themselves to ensure that the flight kitchen production can "get off the ground". In a flight kitchen there is a continuous consumption of materials. These materials can be categorized under two main headings:

- A) Raw materials and disposable materials
- B) The airline's catering-equipment which is to be used again

1

Handling of raw materials



To begin with, let's look at what kind of materials come under heading (A) and where they are used in the functions of the flight kitchen:

Goods reception

In a flight kitchen there is usually a combined goods reception for materials in category (A). Deliveries in this category usually consist primarily of goods such as:

 Raw materials for food production (fresh produce, groceries, tinned goods, vegetables, etc.)

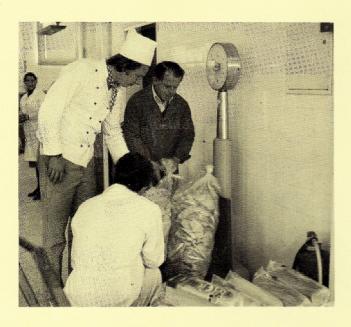
- Bonded goods(e.g.spirits, cigarettes, perfume, etc.)
- Disposable materials (e.g.packaging, disposable glasses, cutlery etc.)

It is the task of goods reception to ensure that the deliveries they receive are put in the correct place.

But before the goods are distributed, there are various other areas of work that have to be

seen to under the management of goods reception
- we might call them supervisory functions:

- Check that the goods in question really have been ordered
- Check that the number/weight of the goods delivered corresponds to what has been ordered



3. Check that the number /weight of the goods delivered corresponds to the supplier's specification

The measures for checking goods listed above are necessary in connection with all deliveries to a flight kitchen since they aim, among other things, in the first place to ensure that the flight kitchen gets the goods that it has ordered, and secondly that it only pays for what is gets.

In addition, it is the task of goods reception to make quality assessments - which is less easy to define since it depends on the kinds of goods and in which connection they are going to be used. Quality assessment is of course straightforward enough when part of a delivery has been damaged; but is is more difficult when it comes to assessing the quality of, for examp-

le, meat and vegetables. One concrete check that should always be made, whenever possible, is the declaration given in the date marking. Depending on the kind of goods this may mean "last day of sale"or"date of processing". Unfortunately you don't always get goods with date stamps. In such cases a quality assessment will have to be based on the colour, smell and consistency of the goods, and similar factors. The criteria by which goods ought to be rejected, on the basis of the factors mentioned above, should be drawn up in collaboration with the respective departments in the flight kitchen that are going to use the goods in question.

In practice a quality check will usually take the form of a spot check. You can imagine how time and energy consuming it would be if you set out to check every single tomato in a consignment.

When the tasks described above have been carried out, the various goods then have to be sent on and distributed throughout the concern. The only exeption to this rule is "bonded goods". For this category of merchandise, there are special rules governing reception, making out receipts and storage, all according to local conditions prevailing. (With regard to storage, see the section on bonded goods, page).

Pre-preparation

As soon as certain goods have been received by the flight kitchen, pre-preparation will have to be arranged before the materials can be put in storage.

This is the case, for example, with vegetableswhich have to be washed, meat - which will have to be cut up, and poultry - which will have to be plucked and skinned, etc.

In pre-preparation, the various kinds of foodstuffs should be cleaned separately with regard to hygiene. (See chapter on Hygiene and Bacteriology).

Fresh-food store

After the first pre-preparation, these foodstuffs are put in the fresh-food store. In addition, a number of foodstuffs will go directly from reception into storage. This will include, for example, dairy produce, smoked foods and frozen foods, etc.

In the fresh-food store foodstuffs may -depending on when it is reckoned that they will be used in food production - be kept in the coldstorage room at around +5°C (for a fairly short period of time). Alternatively, suitable foodstuffs may be frozen in the deep-freeze at -18°C to -22°C. (These are maximum temperatures in a deep-freeze where storage is to take place over an extended period of time).

In the fresh-food store there are several sepa-



rate cold-storage compartments. The various foodstuffs should, with regard to hygiene, be stored in separate compartments. Odour and taste are also important factors in this distribution. We might mention that the following types of foodstuffs, among others, should always be isolated: eggs, vegetables, fish, meat, smoked foods and dairy produce.

Dry store

The dry store, just like the fresh-food store is divided up into several units.

From reception all the foodstuffs that are not to be kept in cold storage are sent to this store - e.g. groceries, tinned foods, etc. In addition, all the non-comestible goods which do not form part of the airline company's catering equipment are put in this store - this means, for example, cleaning materials, disposable materials, packaging, etc.

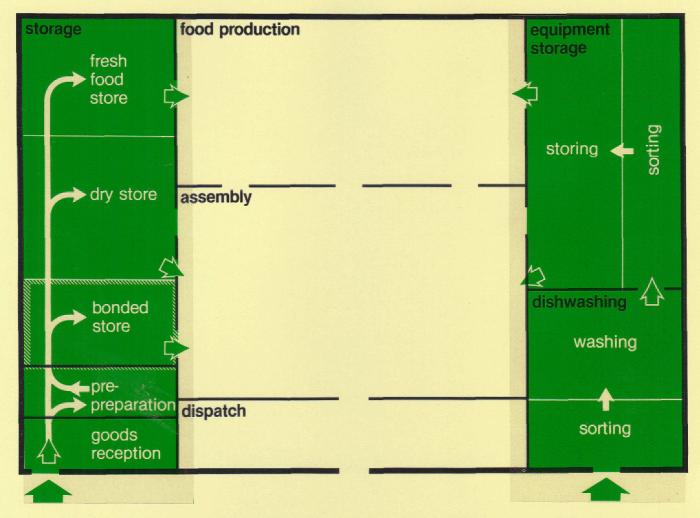
Bonded goods

In the case of the bonded-goods store special rules apply which will vary locally according to the prevailing customs regulations.

In practice, this means that in most places the bonded-goods store is a sealed room to which only a few people with responsibility have access. These people are responsible to the authorities for the duty-free goods stored here in accordance with the local prevailing regulations!

The goods stored here consist for the most part of alcohol, chocolate, perfume, etc. which are to be sold or served on board the planes. In some cases this might mean foodstuffs which an airline company has imported duty-free for use in special menus, with the proviso that consumption of the foodstuffs in question takes place on board. Caviar and goose-liver paté might be examples of this.

Handling of catering equipment



The catering concern's consumption of materials in category (B) comprises an airline company's catering equipment. This is in constant circulation between the planes and catering concerns all over the world.

Dishwashing

When a plane lands, the cabinets are unloaded and driven in high-loaders to the dishwashing section.

When the cabinets are received at the dishwashing section, they must, first of all, be clea-

red out, then sorted, and finally all the stationary equipment must be washed. Briefly, the work tasks can be described as follows:

When the contents of the cabinets have been emptied out, the cabinets must be cleaned. Usually this is done manually - for example, with high-pressure hoses.

The contents of the cabinets are then sorted out. The first thing to be done is to separate the foodstuffs from the other items. In accor-



dance with WHO's directives, all food that is returned from a plane is to be destroyed. This is, of course, obvious in the case of left-over bits of food on used trays, but it is worth noting that trays which have not been used should also be disposed of and the food destroyed. This phase of the work naturally also includes removing bits of food from the returned equipment.

In addition, all the disposable items, such as plastic glasses, disposable cutlery, tray serviettes, etc., should be thrown away just as with the food items.

In the part of the dishwashing section where the cabinet break-down is carried out the room temperature must, for hygienic reasons, be kept relatively low (See chapter on "Hygiene and Bacteriology" and "Manual" chapter).

Also for hygienic reasons, it is absolutely necessary that ALL rubbish should, immediately after sorting in the dishwashing section, be removed and stored in cooled rooms until final incineration can take place.

When the operations described here have been carried out, we will be left with a collection

of various equipment which will have to be washed in the dishwashing machines. This equipment should be roughly sorted out into different categories and placed on respective trays which can then be sent through the dishwashing machines.

With regard to equipment that is returned unused from the planes, the rule applies that everything must be washed before it is used again! This regulation, which is a directive from WHO, is completely analogous to the rules concerning returned food and disposable items.

When the equipment is sent through the dishwashing machines, it should be washed at a minimum temperature of $+80^{\circ}$ C. Together with the soap, a disinfectant should be added to help to maintain the standards of hygiene.

Equipment-storage

After the equipment has been properly washed, it must be put in storage. In a part of the storage department another sorting is now carried out, since it is not enough to divide the catering equipment up into types; It is a practical necessity to keep the respective airline company's various equipment together. Organized in this way, it is easy for equipment storage to deliver the total equipment which Assembly needs when packing deliveries for the individual plane.

In addition this phase of sorting serves to ensure that all chipped or otherwise damaged equipment is separated out. This means of course that there is a constant reduction in the airline company's stock of equipment. Here we have touched on a central problem in the management of the equipment department.

One of the tasks required by the airline company in this respect is a regular stock-taking of the equipment in stock. But how is it at all possible to make a check when, as mentioned be-

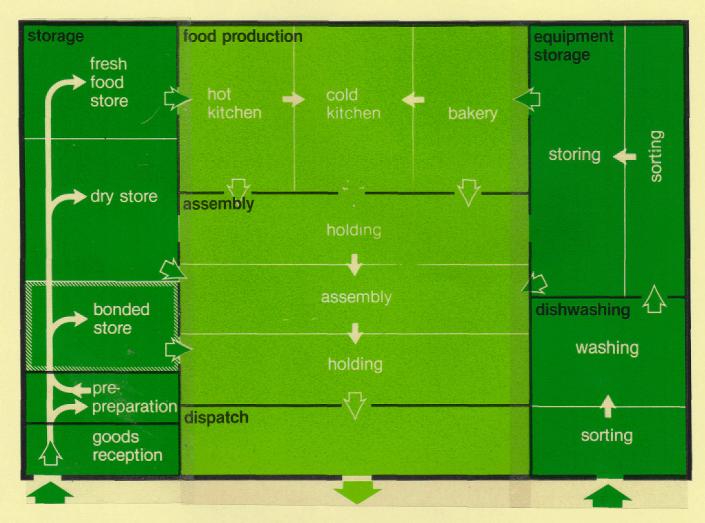
fore, the airline company's equipment is in constant circulation between catering companies all over the world, and the number of passengers varies from flight to flight? In practice, this never becomes a real problem. Although it is ALWAYS the case that only the number of meals corresponding to the number of passengers are loaded on a plane, the maximum amount of equipment is always loaded. (This is not done primarily with regard to the problem mentioned above, but it is significant with respect to the plane's weight distribution and so on; in practice it means that a plane always loads and unloads the same amount of equipment!)

In this way, the airline companies can keep a

running check on the catering concerns' stocks, and assess to what extent losses are in reasonable proportion to total stocks. Conversely, the flight kitchen can keep a standing order for the necessary replacement equipment.

In addition to tableware, linen (towels, nap-kins, and so on) - for use on board the planes - is kept in the equipment store. These items are received by the equipment store from either the flight kitchen's own laundry - if there is one - or an outside concern which takes care of this matter. When a plane is unloaded, this is some of the equipment that is sorted out while it is still in the high-loader and sent directly to the laundry without having to go through the dishwashing department.

Food-preparation and delivering



When the demand for various materials in the flight kitchen can thus be met, the actual preparation and all the practical tasks connected with this (before the food can be delivered to the planes), such as wrapping and prepacking, can be commenced. These functions are taken care of by the Food-Production, Assembly and Dispatch departments.

Food-Production

In the food-production department the actual preparation of the various meals which the

flight kitchen has to deliver to the planes takes place.

In order to be able to plan the production of a given delivery the food-production department must know firstly, the composition of the menu and secondly, the number of passengers on the plane where the food is to be used.

In flight kitchens it is especially important to reach unambiguous agreements with the airline companies, who are the customers, not only as to:

- What the menues are to be composed of (e.g. hot meal: first course, main course, dessert), but also
- 2. How many grammes each item is to weigh, and
- How the individual course is to be arranged on the plates.

This information, which should be available to all the staff in the flight kitchen, can, for example, be described on menu cards which, furthermore, can be furnished with photos showing how the respective meals are to look when they are served on the plane.

With regard to the number of passengers it is important to emphasize that the flight kitchen should be kept up to date with this information the whole time. Of course the types of planes involved will always be known and hence the maximum number of meals that may have to be delivered; but in practice the number of passengers on individual routes varies a lot with each departure. Seat reservations are made and cancelled every minute. In the final hours before a production is started the flight kitchen therefore receives continual corrections to its list of the number of passengers.



When the flight kitchen and the airline companies make catering agreements, it is also decided at the same time how late the flight kitchen will agree to accept corrections in the number of passengers without the airline company having to pay extra.

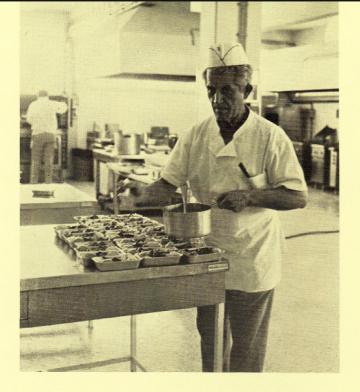
When these conditions are met, the food-production department can order the raw materials they will need from the Fresh-Food Store and the Dry Store, as well as the necessary tableware from the Equipment Store - after which work can start.

The equipment ordered from the Equipment Store includes, for example, the trays, cocottes and other tableware on which the individual meals will be delivered to the planes. Pots, pans, baking trays, cooking implements and so on come under what we earlier called "facilities", and this equipment does not leave the flight kitchen. All these things will be cleaned as they are used in a separate part of the food-production department.

The food-production department, as shown in the diagram of the flight kitchen's lay-out and functions, is subdivided into three smaller sections

- hot kitchen
- cold kitchen
- bakery





Hot-kitchen

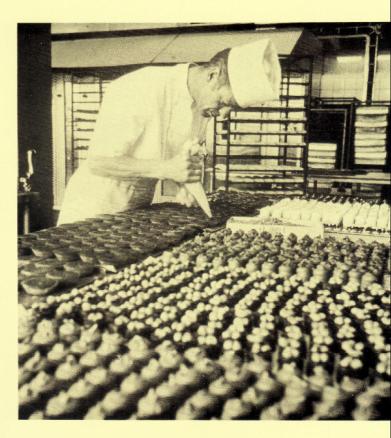
This is where the hot dinner-courses are prepared. A large part of the meat, etc., which the cold-kitchen uses in making sandwiches is also produced here!



Cold-kitchen

The cold-kitchen makes other things besides sandwiches. This section is, in addition, also responsible for breakfasts and hors d'oeuvres for first class.

As well as from the hot-kitchen, the cold-kitchen also receives materials from the bakery - e.g. rolls for the breakfasts which the cold-kitchen makes.



Bakery

The bakery's most important task, besides the production of bread, is to supply desserts and cakes.

The three sections in the food-production department must work together in planning the course of each individual production:

- because in some cases the sections supply materials to one another
- 2. because the assembly-department is dependent on getting all the components that are to go together on trays at one and the same time.

From the food-production department the prepared meals are sent to the assembly department.

Assembly

As shown in the diagram of the flight kitchen's lay-out and functions, the assembly department is subdivided into three smaller sections:

- holding
- assembly
- holding

When the food arrives from the food-production department, it goes to the first holding section in the assembly department. Here it must be kept in the cooling room for a minimum of two hours (see chapter on Hygiene and Bacteriology) before it may be sent on to the actual assembly section. In other words the first holding section serves as a reception area for all the components which are to be put together on trays in the assembly section.

To keep check on the tray-setting in the assembly section assembly cards, analogous to the food-production's menu cards, have been worked out specifying which components there should be on the individual trays and also how they should be laid out.

Just as in the food production department, the work-plan is dependent on the number of passengers.

Just as in the food-production department, corrections as to the number of passengers are continually sent in during the last few hours before the whole production is to be delivered in cabinets to the planes.

The only food set on trays together with equipment is cold meals and desserts.

It is important to notice that the hot meals are NOT put on trays in the assembly section.

This is done on the plane immediately prior to serving. The cocottes which the hot meals are put in in the hot-kitchen are already at this stage put in the cabinets.

These are sent directly to the assembly department's 2nd holding area.

One of the assembly department's tasks is to collect all the different cabinets with their various contents which are to be delivered to the individual planes.

The golden rule in the assembly department is that NO loose items are to be delivered to the plane. In other words: no loose jugs, pastry forks, towels or anything else. EVERYTHING is to be packed in cabinets.

Each of the cabinets is given a number which refers to a specific location in the plane's galley. The number code on the cabinets indicates the contents of the cabinets for reference of the flight staff.

When all these tasks have been carried out, all the cabinets are placed in holding number two.

The cabinets containing food are kept cool and must stay in the cooling room for at least two hours before they may be delivered to the dispatch department. (See chapter on Hygiene and Bacteriology).

Dispatch

The dispatch department is responsible for <u>loading</u> the planes with the cabinets from the assembly department and furthermore for unloading the cabinets with the used equipment off the planes and delivering them to the dishwashing department.